V360 Smartphone
Service Guide

Service guide files and updates are available on the ACER/CSD web; for more information, please refer to
http://gcsd.acer.com.tw/GCSD_Portal/

PRINTED IN TAIWAN

Revision History

Please refer to the table below for the updates made on the **V360** smartphone service guide.

Date	Chapter	Updates

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Conventions

The following conventions are used in this manual:

SCREEN MESSAGES	Denotes actual messages that appear on screen.
NOTE	Gives bits and pieces of additional information related to the current topic.
WARNING	Alerts you to any damage that might result from doing or not doing specific actions.
CAUTION	Gives precautionary measures to avoid possible hardware or software problems.
IMPORTANT	Reminds you to do specific actionsm relevant to the accomplishment of procedures.

Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine. These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

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System Specifications

Features

Below is a brief summary of the smartphone's many features:

Form Factor & Dimension

- Bar Type, 130 x 67 x 9.9 mm

OS

- Android Jelly Bean

Modes/Bands

- HSPA Dual-band 900/2100
- HSDPA up to 7.2Mbps
- HSUPA up to 5.76Mbps
- GSM Qual-band 850/900/1800/1900
- EDGE class 12/GPRS class 12

Platform

- Mediatek MT6577

Memory

- 8Gb LPDDR2 + 4GB eMMC

Display

- 4.5" qHD, Capacitive Multi-Touch (4 pts at least)

Camera

- Rear 5MP AF (with Flash) + Front VGA

Connectivity

- BT4.0, WiFi IEEE802.11 b/g/n, WAPI, FM Radio

GPS

- GPS/AGPS

Sensor

- G-sensor, P + L sensor, E-compass

I/O

- Micro-USB, 3.5mm HSJ

Keys/Switches

- Cap Touch Key for Back/Home/Menu
- Side Key: Power key, Volume up/down

Battery

- 1760mAh

Expansion Slot

- Micro SD Memory Card

Others

- DSDS, 3-color LED Indicator, SRS

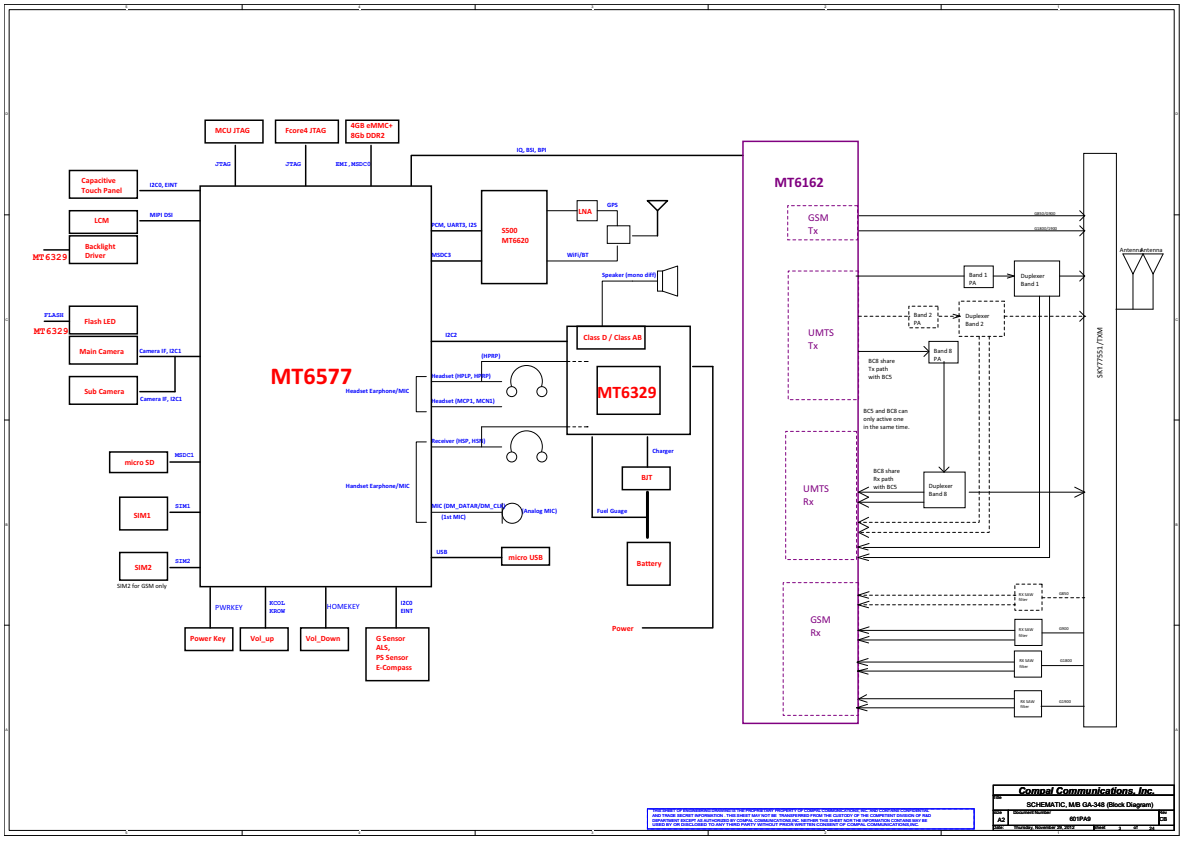
Optional

- NFC

Accessory

- Headset, Adaptor, USB Cable, Battery

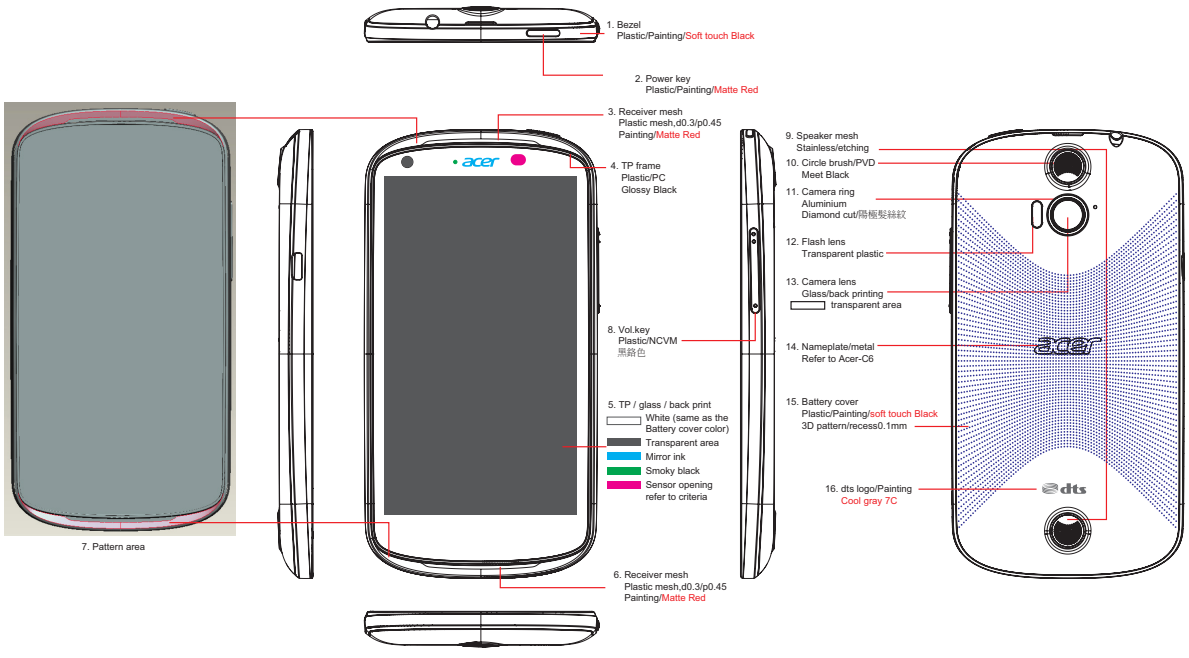
System Block Diagram



Your Acer Smartphone Tour

After examining your smartphone features, let us show you around your new smartphone.

Views



No.	Item	Description
1	Bezel	Plastic/Painting/Soft touch Black
2	Power key	Plastic/Painting/Matte Red
3	Receiver mesh	Plastic mesh,d0.3/p0.45 Painting/Matte Red
4	TP frame	Plastic/PC Glossy Black
5	TP / glass / back print	White (same as the Battery cover color) Transparent area Mirror ink Smoky black Sensor opening refer to criteria
6	Receiver mesh	Plastic mesh,d0.3/p0.45 Painting/Matte Red
7	Pattern area	
8	Vol.key	Plastic/NCVM 黑鉻色
9	Speaker mesh	Stainless/etching
10	Circle brush/PVD	Meet Black

No.	Item	Description
11	Camera ring	Aluminium Diamond cut/ 陽極髮絲紋
12	Flash lens	Transparent plastic
13	Camera lens	Glass/back printing transparent area
14	Nameplate/metal	Refer to Acer-C6
15	Battery cover	Plastic/Painting/soft touch Black 3D pattern/recess0.1mm
16	dts logo/Painting	Cool gray 7C

Hardware Specifications and Configurations

HW Specifications

Item	Specification
Band	Dual-Band (Band 1 & Band 8) WCDMA ; Quad-band EDGE/ GPRS/ GSM
Application/ Modem Processor	MT6577
Power Management	MT6329A
RF Transceiver	MT6162
Memory	8Gb LPDDR2 + 4GB eMMC MCP memory
Expansion Flash Card Slot	Micro SD
Connectivity	Bluetooth 3.0 with EDR, WiFi b/g, FM radio, 3.5mm Audio jack, microUSB2.0 HS
GPS	standalone and assisted
Camera	5M AF camera, with flash light; VGA camera
LCM	4.5” qHD (540 x 960) 16.7M colors TFT
Touch Panel	Capacitive touch
Sensors	G-Sensor, E-Compass, P&L Sensor
Indication LED	Yes
Keypad	Hardware keys: power/standby key, volume up/ down
Battery	176mAH, Removable battery
Dual SIM	Optional Dual standby Single Talk HW reserved (one for 3G & one for GSM voice)

Processor

Item	Specification
CPU	1 GHz dual-core Cortex-A9 MCU core for applications/MMI
	520 MHz ARM1176 + 260 MHz DSP modem cores
CPU Package	537 balls
Core Logic	Cortex-A9
Modem	ARM1176
UART	4 x UART to 3Mbps (EDR) for GPS, BT, FM-RDS, modem and debugging interfaces
SDIO	4 x SDIO interfaces (SD/MMC/MS & MSPro, eMMC v4.4)
Audio/video decoders	MPEG4, H.264, H.263, VP8 Codecs, MP3, AAC, AAC+, eAAC+, AMR, WB-AMR, MIDI, Ogg Vorbis, PCM
USIM	Dual SIM (Single Talk), Built-in support for dual-voltage USIM

4.5” a-Si TFT-LCD

Item	Specification
Display resolution (pixels)	960(V)x540(H)
Supported Colors	16.7M
Type	Transmissive

Battery

Item	Specification
Vendor	APACK
Rating	3.75V

Item	Specification
Maximum Charging Voltage	4.35V
Pack capacity	1300 mAh
Talk time	Talk time 3G: 4 hours dependent on usage / 2G: 5 hours dependent on usage
Standby	300 hours (WDCDMA) dependent on network, 300 hours (GSM) dependent on network.

Camera

Item	Specification
Type	• Built-in 5 megapixel Auto-Focus camera, up to 2592 x 1944 resolution

System Memory

Item	Specification
Memory embedded	8Gb LPDDR2 + 4GB eMMC MCP memory
Memory expansion	Micro SD Card slot

Software Upgrades

System Requirements

- Microsoft® Windows XP or above
- P4, 2.8G and Ram 1G DDR or above
- Latest version of EUU (End-user Upgrade Utility / EUU_xxx.msi)
- Tool: USB Cable

NOTE: Please make sure mobile battery power is over 50% before execute EUU.

NOTE: Please disable Anti-Virus software if EUU is blocked by it.

NOTE: The minimum requirement of the OS disk is 1 GB space

1. Software Upgrading

Acer C10 upgrading software program applies SP_Flash_Tool.

Refer to the following for its specific configurations and download steps

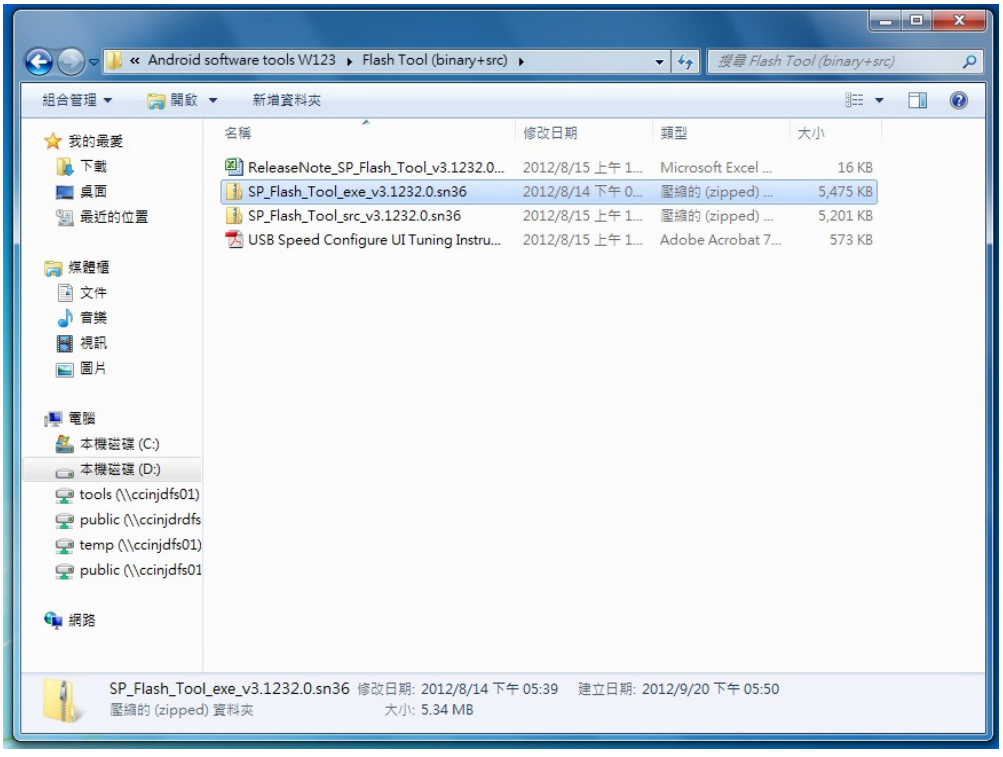
1.1 Hardware configurations and parts requirements

Item	Equipment	Standard configuration	Qty
1	PC	Win2000/WinXP/Win7/USB2.0	1
2	Download cable		1
3	Battery		1
4	Download Tool		1

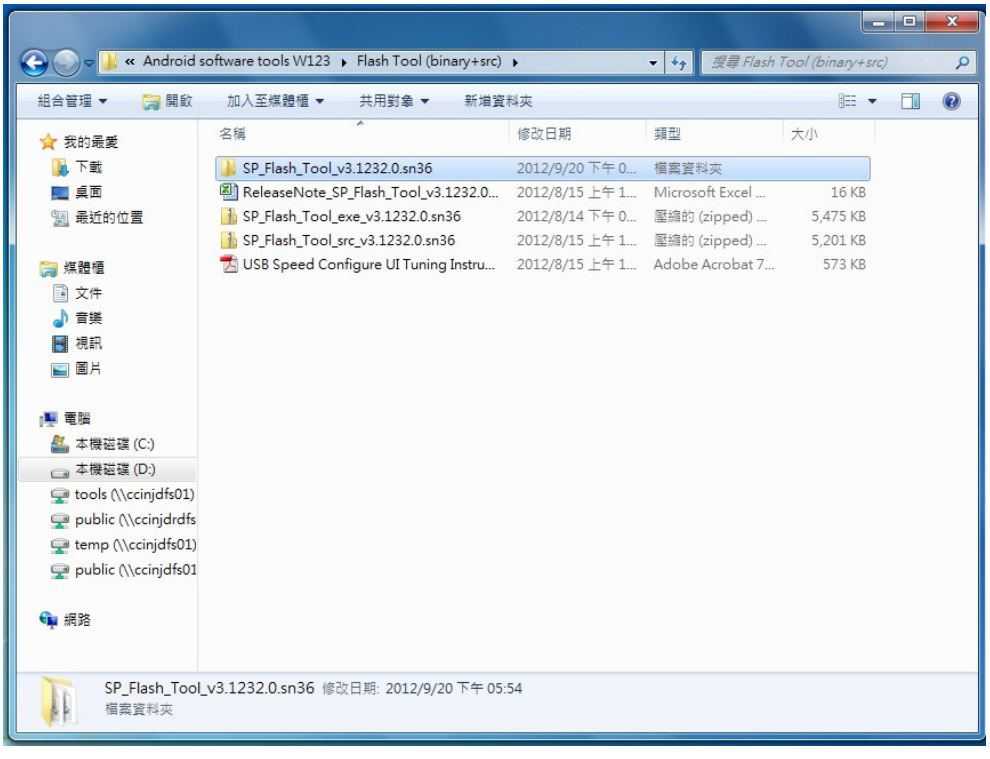
1.2 Operation steps

1.2.1 Install the upgrading tool

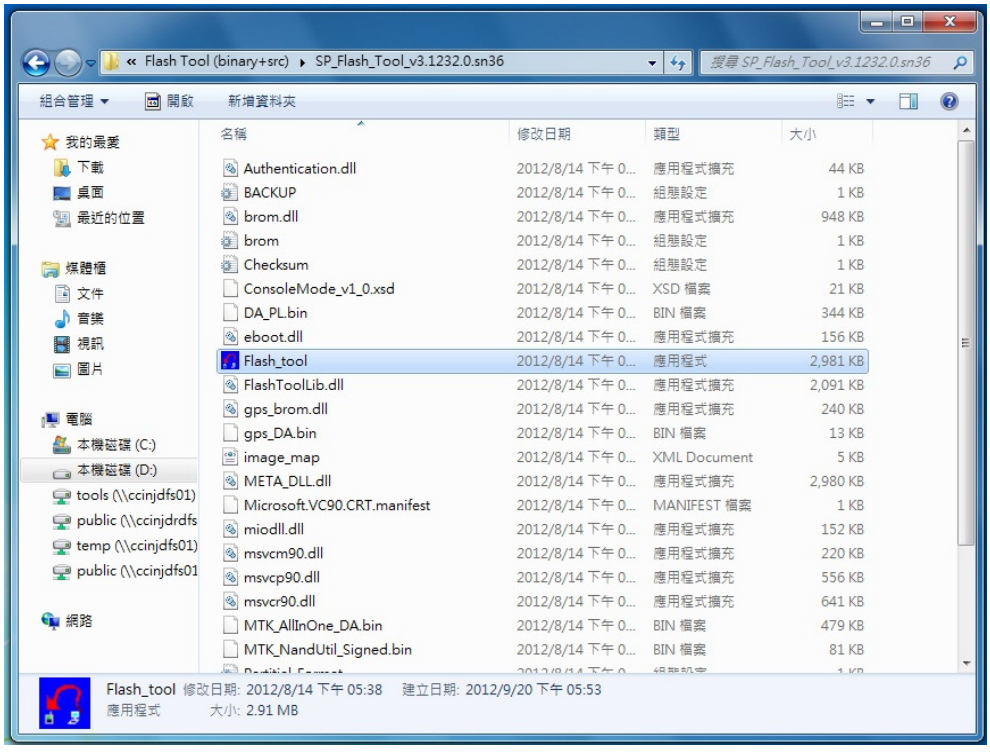
Step 1. Open the SP_Flash_Tool_exe__v3.1236.0.zip and decompress it to SP_Flash_Tool_exe__v3.1232.0.36 folder.

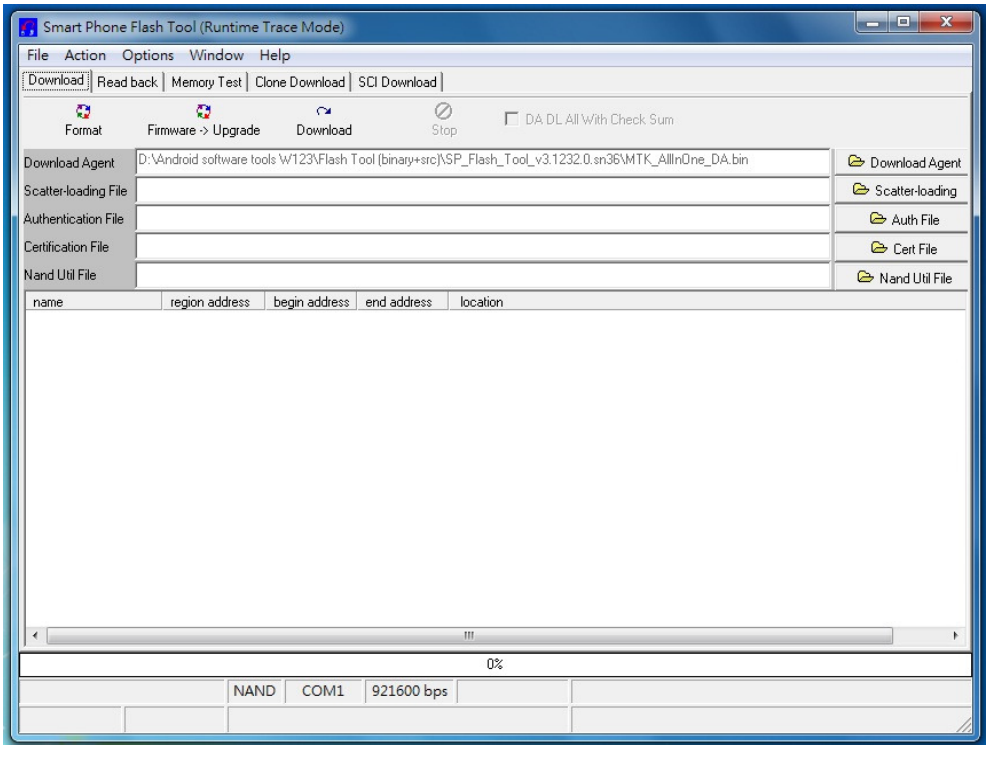


Step 2. Enter the SP_Flash_Tool__v3.1232.0.sn36 folder.



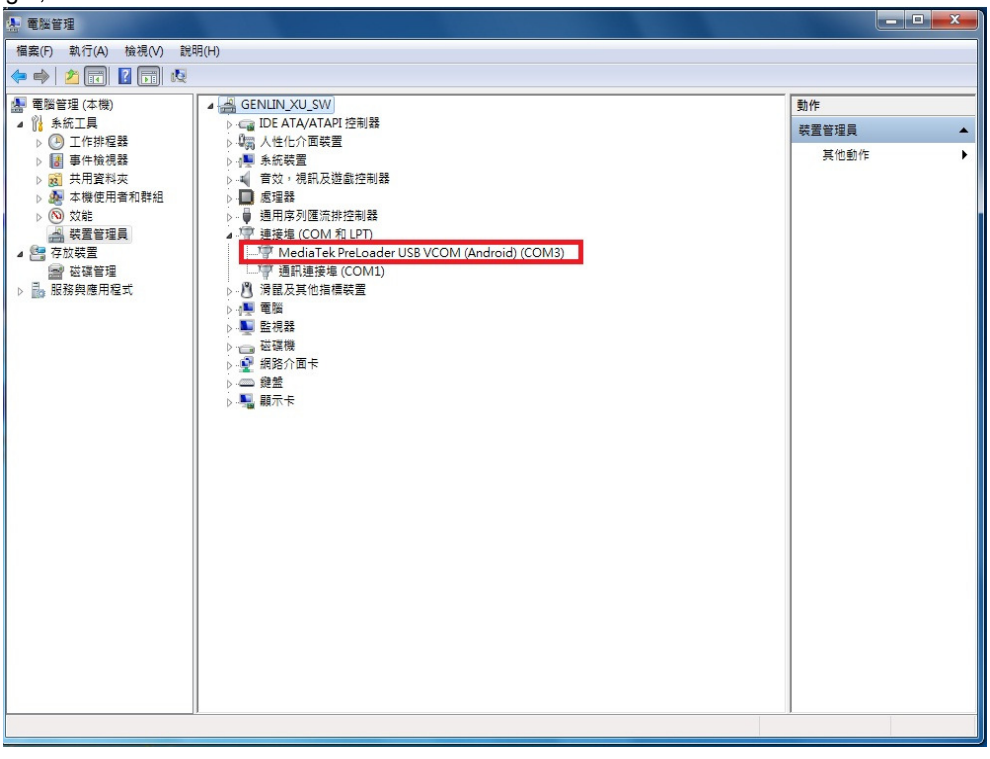
Step 3. Click "Flash_tool.exe" icon to open the Flash Tool


« Flash Tool (binary+src) ▸ SP_Flash_Tool_v3.1232.0.sn36
搜尋 SP_Flash_Tool_v3.1232.0.sn36
組合管理
開啟
新增資料夾
我的最愛
下載
桌面
最近的位置
媒體櫃
文件
音樂
視訊
圖片
電腦
本機磁碟 (C:)
本機磁碟 (D:)
tools (\\ccinjdfs01)
public (\\ccinjdrdfs
temp (\\ccinjdfs01)
public (\\ccinjdfs01
網路
名稱
修改日期
類型
大小
Authentication.dll 2012/8/14 下午 0... 應用程式擴充 44 KB
BACKUP 2012/8/14 下午 0... 組態設定 1 KB
brom.dll 2012/8/14 下午 0... 應用程式擴充 948 KB
brom 2012/8/14 下午 0... 組態設定 1 KB
Checksum 2012/8/14 下午 0... 組態設定 1 KB
ConsoleMode_v1_0.xsd 2012/8/14 下午 0... XSD 檔案 21 KB
DA_PL.bin 2012/8/14 下午 0... BIN 檔案 344 KB
eboot.dll 2012/8/14 下午 0... 應用程式擴充 156 KB
Flash_tool 2012/8/14 下午 0... 應用程式 2,981 KB
FlashToolLib.dll 2012/8/14 下午 0... 應用程式擴充 2,091 KB
gps_brom.dll 2012/8/14 下午 0... 應用程式擴充 240 KB
gps_DA.bin 2012/8/14 下午 0... BIN 檔案 13 KB
image_map 2012/8/14 下午 0... XML Document 5 KB
META_DLL.dll 2012/8/14 下午 0... 應用程式擴充 2,980 KB
Microsoft.VC90.CRT.manifest 2012/8/14 下午 0... MANIFEST 檔案 1 KB
miodll.dll 2012/8/14 下午 0... 應用程式擴充 152 KB
msvcm90.dll 2012/8/14 下午 0... 應用程式擴充 220 KB
msvcp90.dll 2012/8/14 下午 0... 應用程式擴充 556 KB
msvcr90.dll 2012/8/14 下午 0... 應用程式擴充 641 KB
MTK_AllInOne_DA.bin 2012/8/14 下午 0... BIN 檔案 479 KB
MTK_NandUtil_Signed.bin 2012/8/14 下午 0... BIN 檔案 81 KB
Flash_tool 修改日期: 2012/8/14 下午 05:38 建立日期: 2012/9/20 下午 05:53
應用程式 大小: 2.91 MB

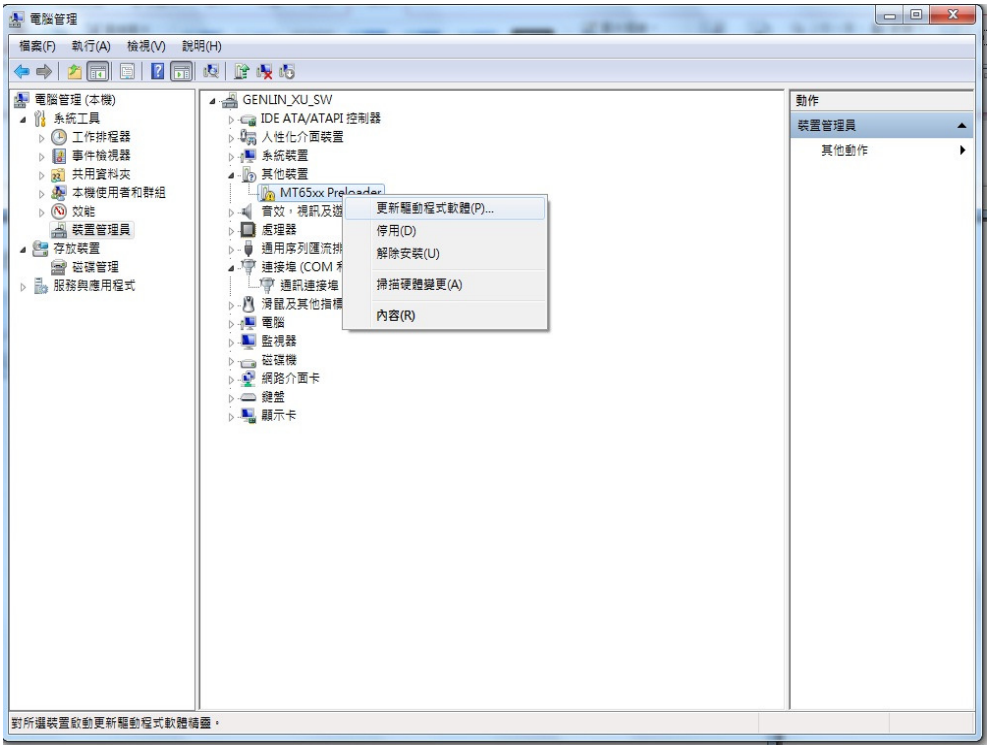


1.2.2 Install the download cable driver

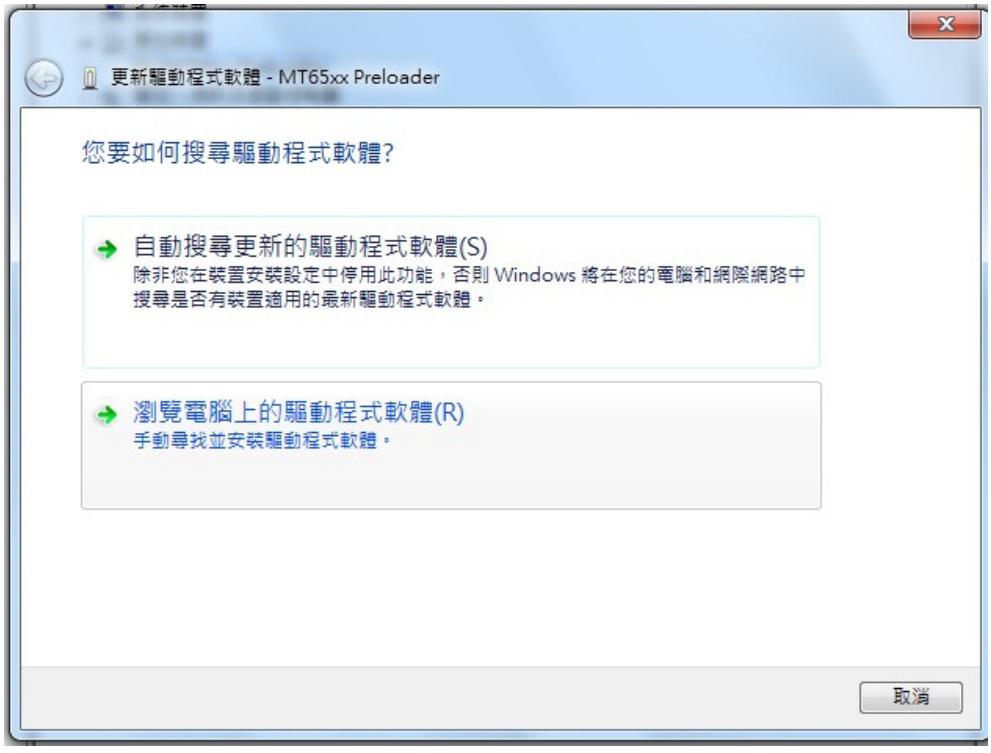
Step 1. Connect the USB cable after removing the cell phone battery and insert it into a PC, enter the device manager, the MTK USB Port will be viewed.



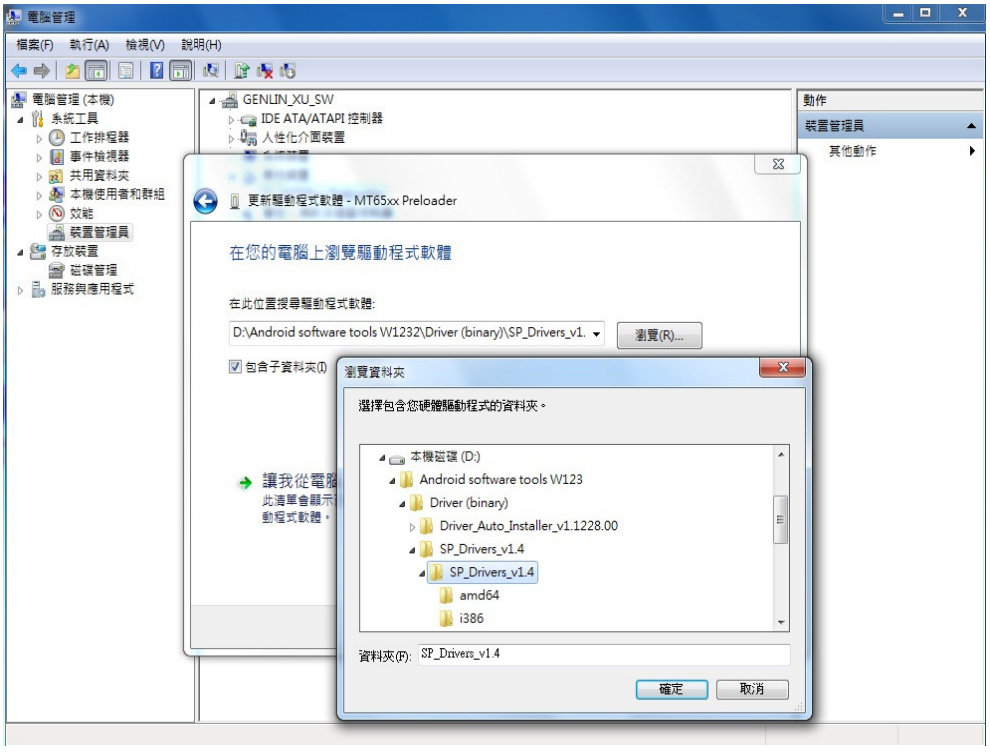
Step 2. Right-click to update the driver software.



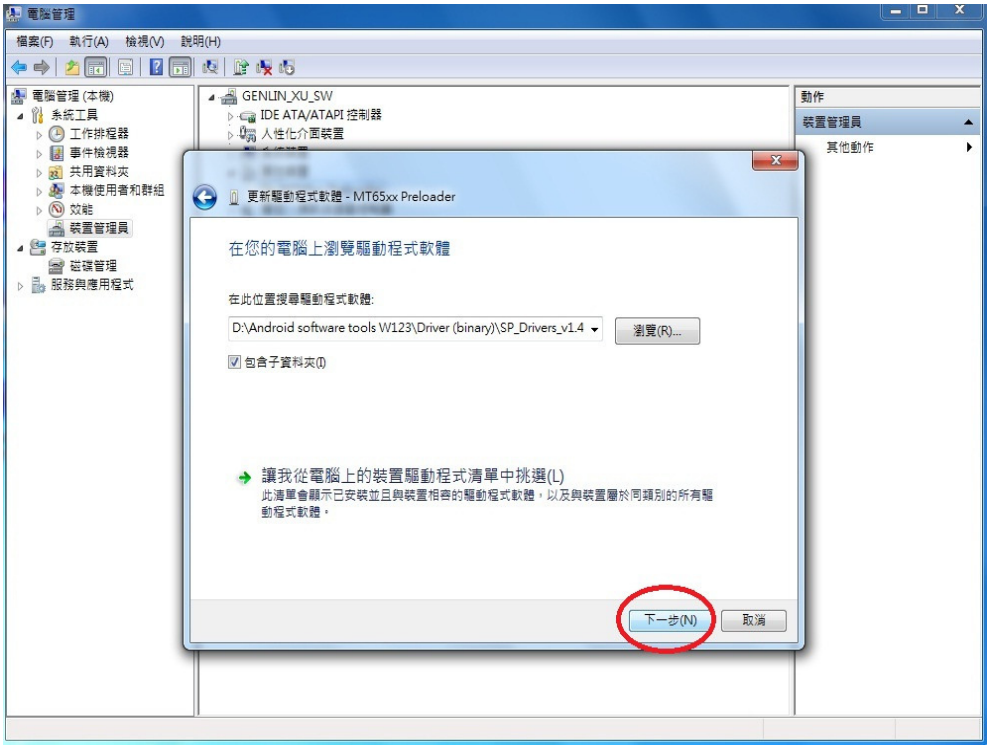
Step 3. Click to browse the driver software on the PC.



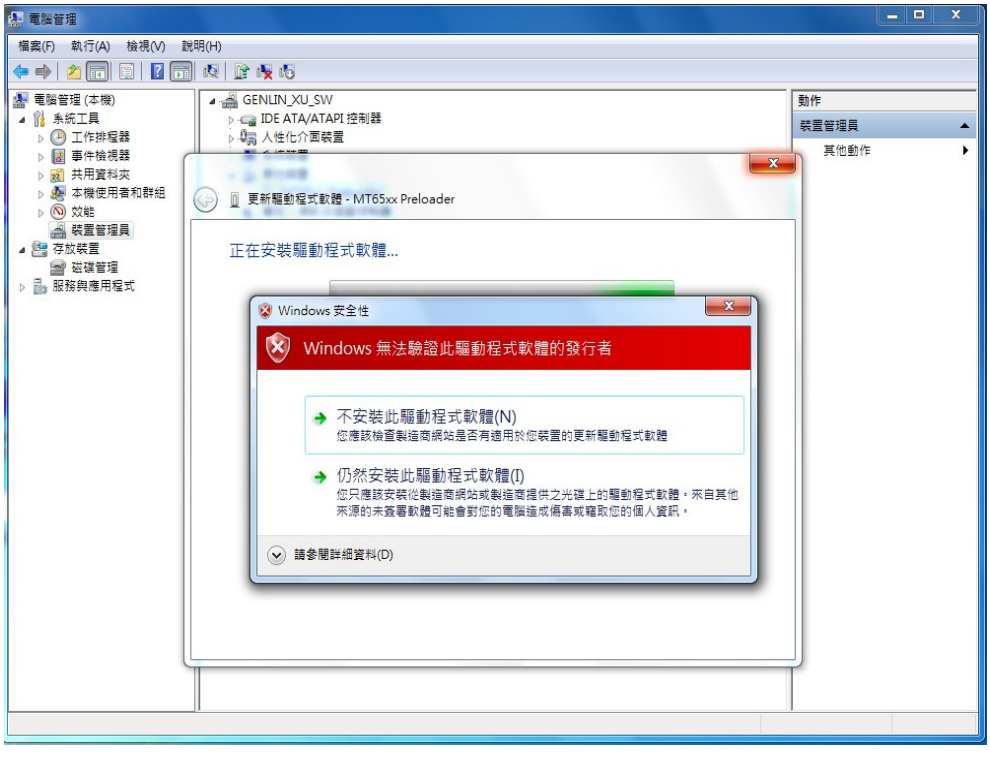
Step 4. Select the USB VCOM Drive folder, select SP_Drivers_V1.4 and click OK.



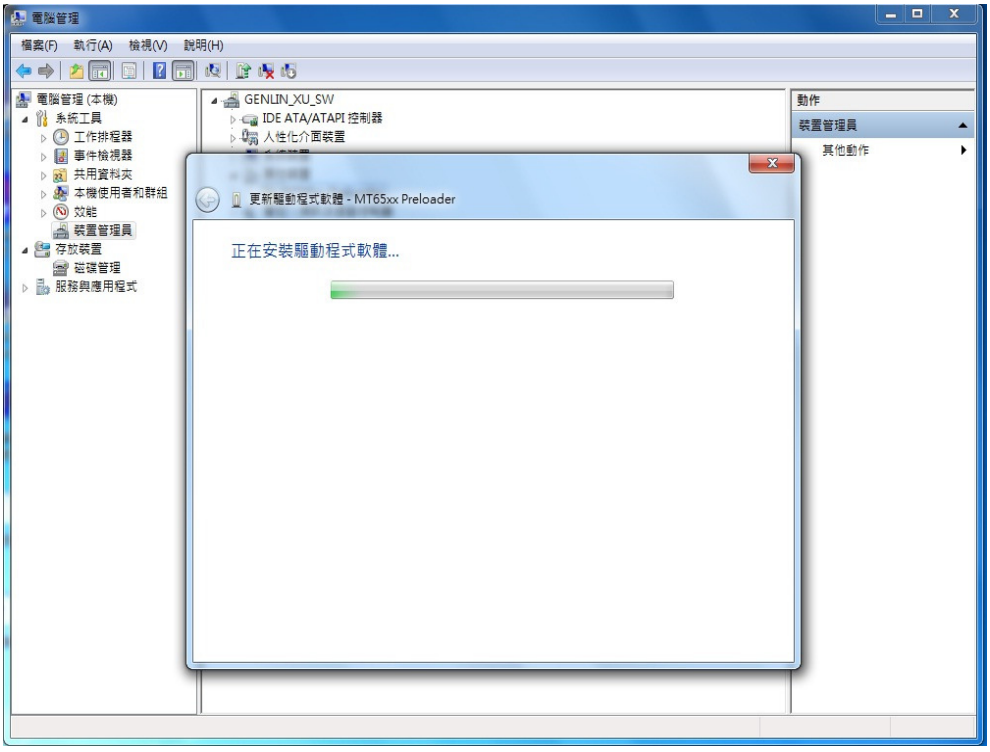
Step 5. The PC will enter the following interface after clicking OK, Click Next.



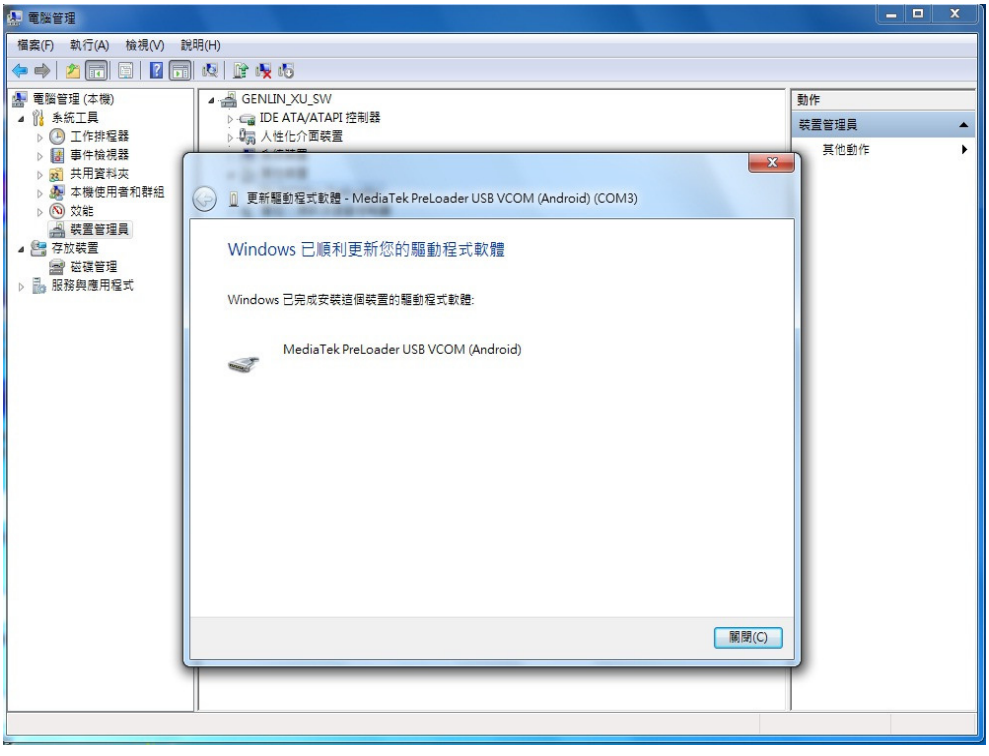
Step 6. The PC will enter the following interface after clicking OK (Safety Tips), select keep installing this driver again to install it.



Step 7. The PC will enter the interface "Install the driver".

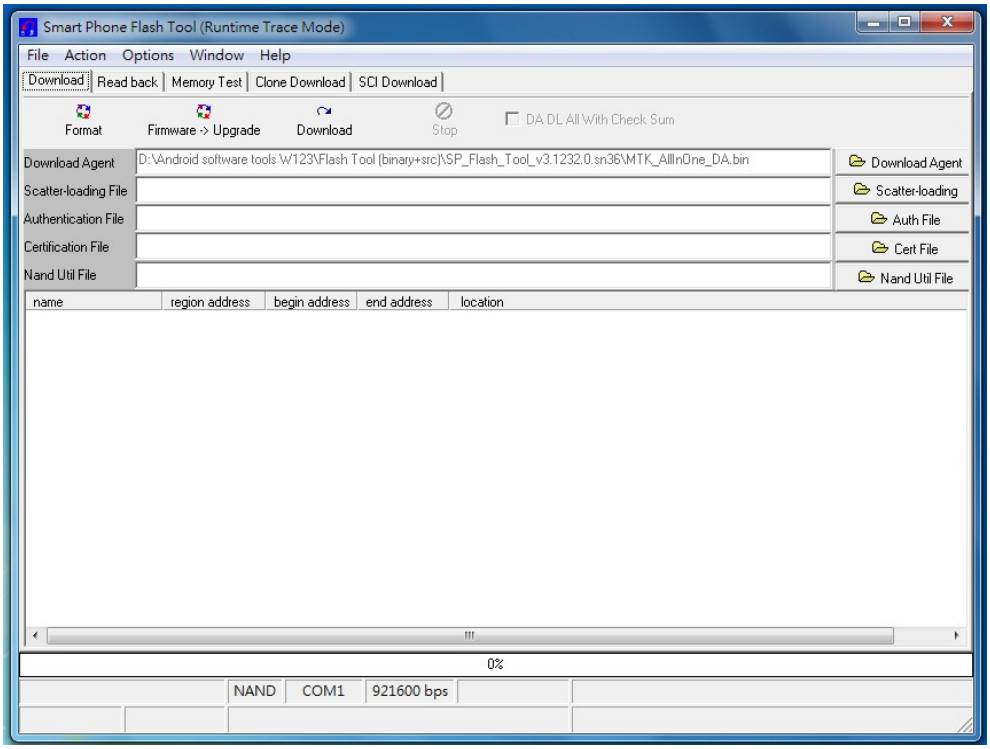


Step 8. The installation is completed.

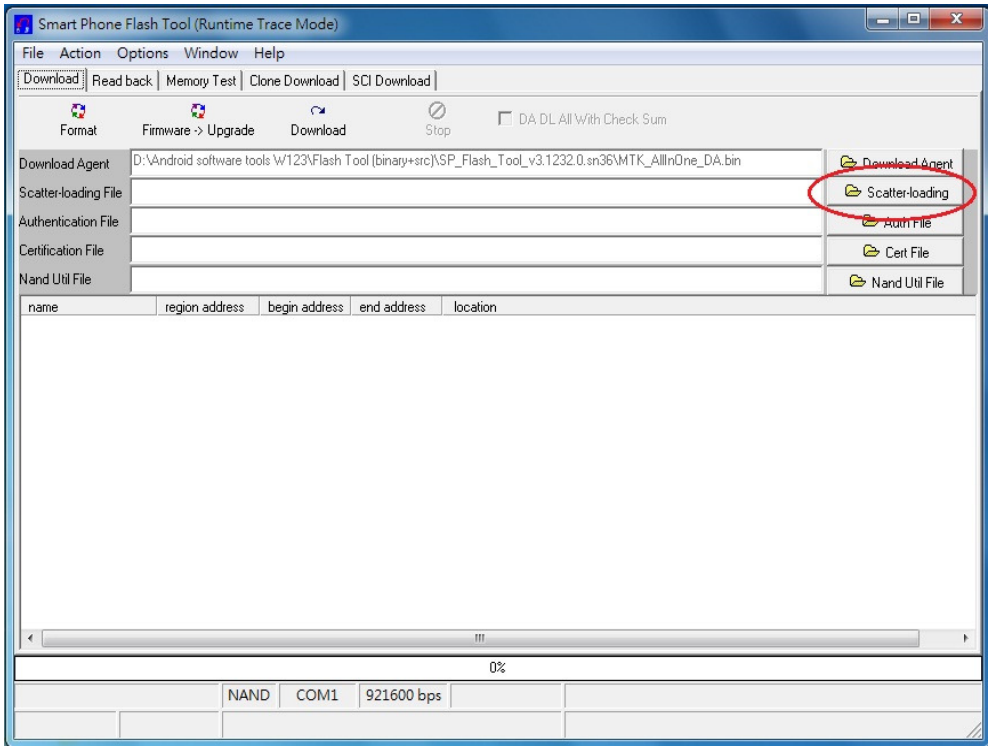


1.2.3 Upgrading steps

Step 1. Return to SP_Flash_Tool and remove the USB cable from the PC.

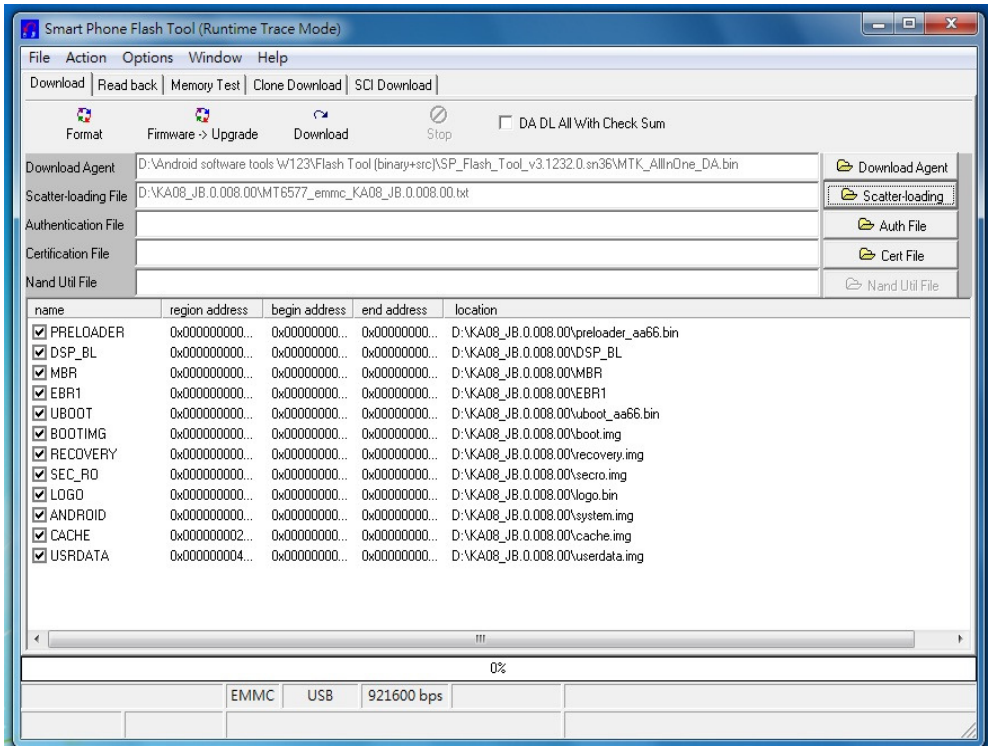


Step 2. Press Scatter-loading.

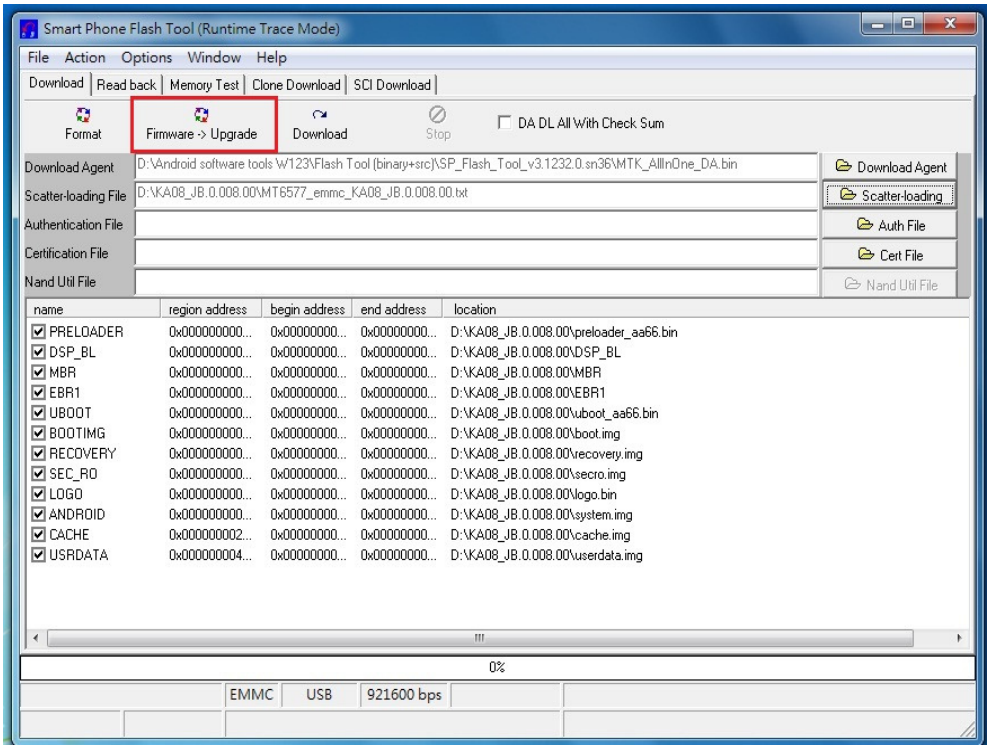

Smart Phone Flash Tool (Runtime Trace Mode)
File Action Options Window Help
Download Read back Memory Test Clone Download SCI Download
Format Firmware -> Upgrade Download Stop DA DL All With Check Sum
Download Agent D:\Android software tools W123\Flash Tool (binary+src)\SP_Flash_Tool_v3.1232.0.sn36\MTK_AllInOne_DA.bin
Scatter-loading File
Authentication File
Certification File
Nand Util File
Download Agent
Scatter-loading
Auth File
Cert File
Nand Util File
name region address begin address end address location
0%
NAND COM1 921600 bps

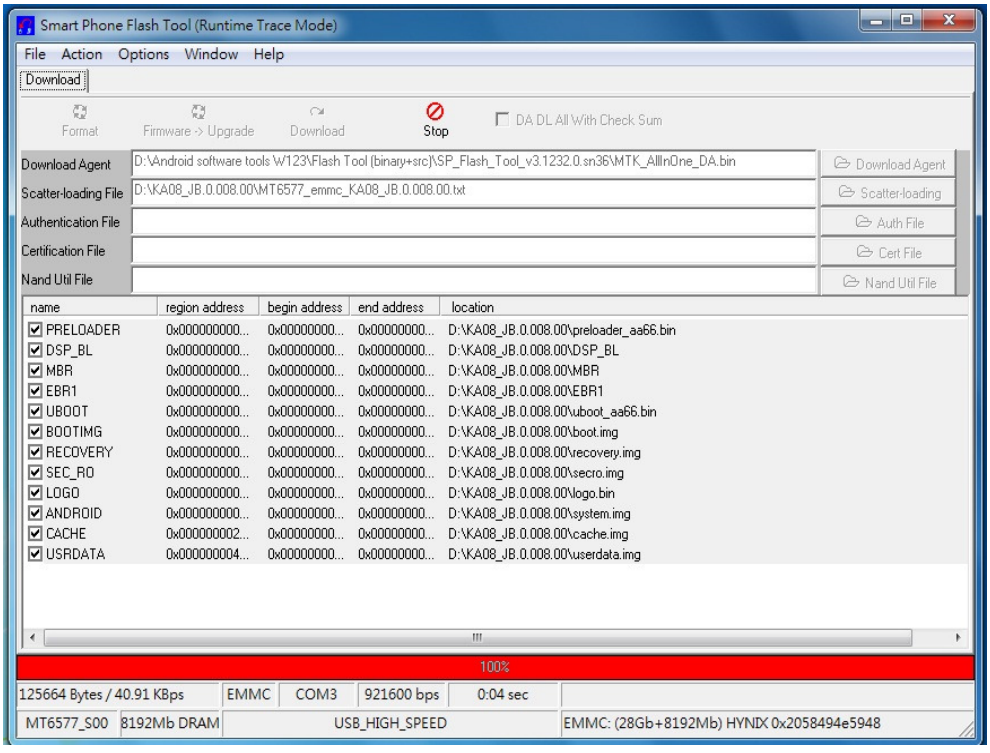
Step 3. The following folder will pop up, select the MT6577_emmc_AA66_XXXXX. txt in image.

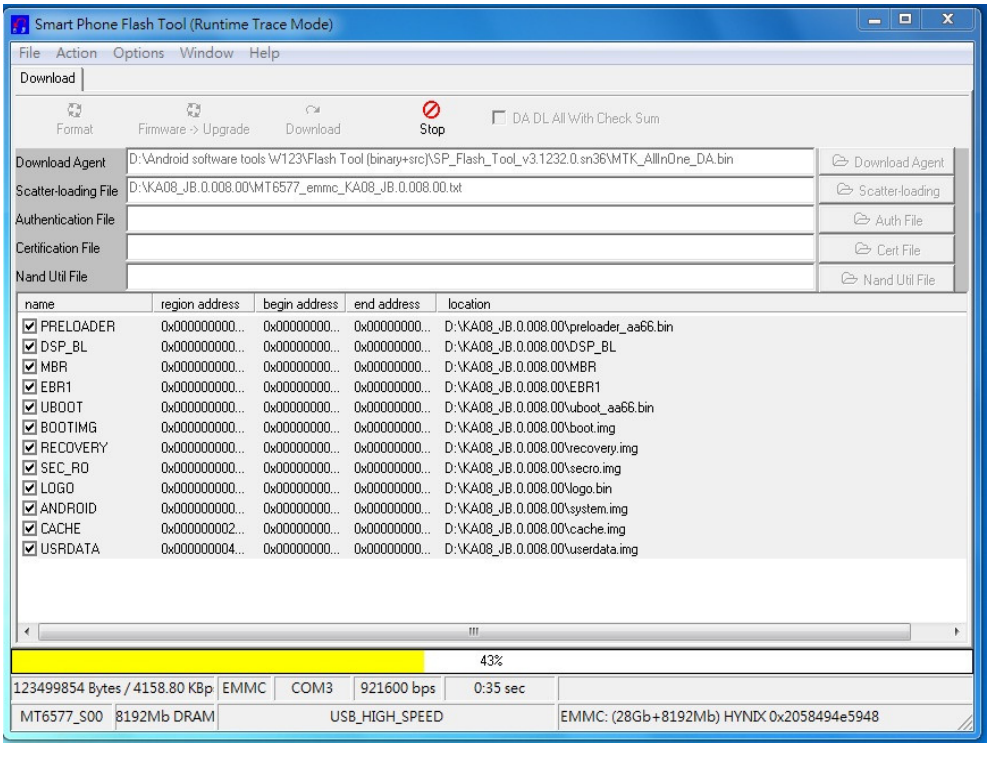
Step 3. The following folder will pop up.



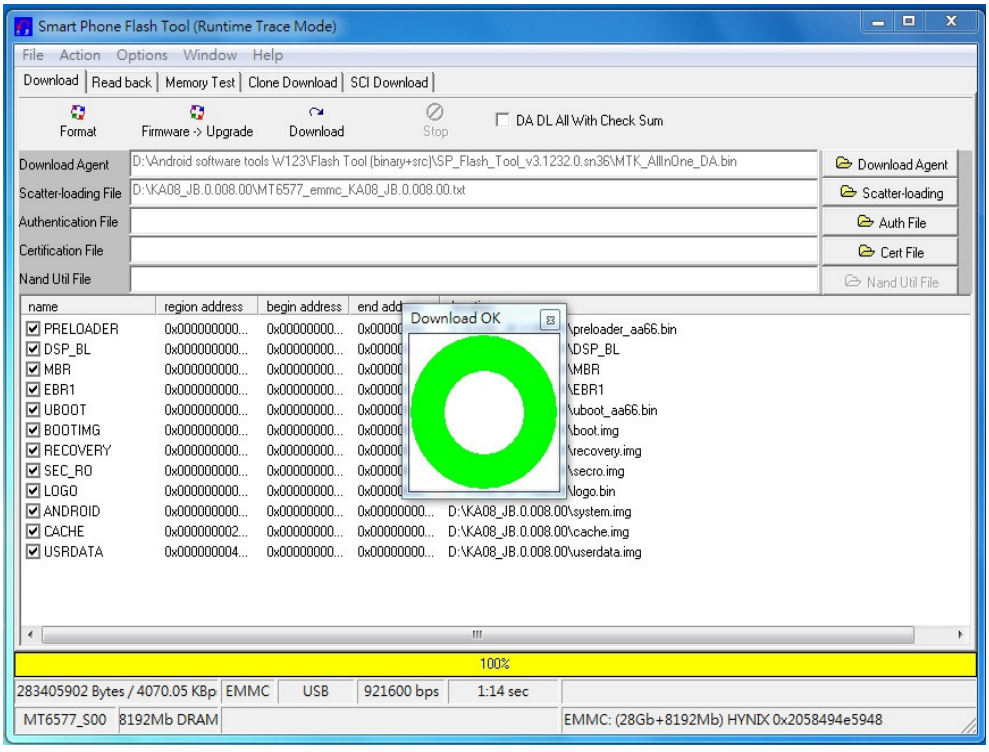
Step 4. Press Firmware->Upgrade and connect the cell phone (with its battery installed properly) to a PC via a USB cable for upgrading.







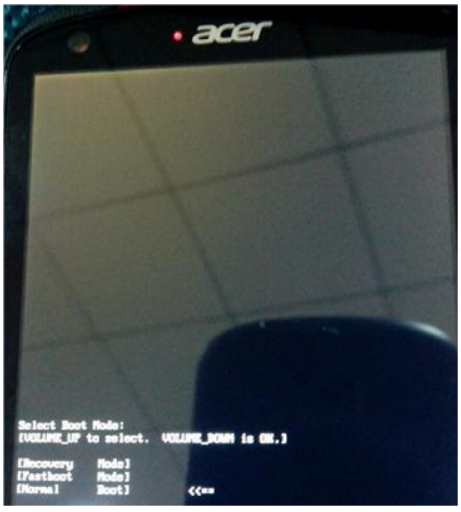
Step 4. The following interface will pop up to prompt that the upgrading is completed after the above two interfaces appear.


Smart Phone Flash Tool (Runtime Trace Mode)
File Action Options Window Help
Download Read back Memory Test Clone Download SCI Download
Format
Firmware -> Upgrade
Download
Stop
DA DL All With Check Sum
Download Agent
D:\Android software tools W123\Flash Tool (binary+src)\SP_Flash_Tool_v3.1232.0.sn36\MTK_AllInOne_DA.bin
Scatter-loading File
D:\KA08_JB.0.008.00\MT6577_emmc_KA08_JB.0.008.00.txt
Authentication File
Certification File
Nand Util File
Download Agent
Scatter-loading
Auth File
Cert File
Nand Util File
name
region address
begin address
end add
PRELOADER
DSP_BL
MBR
EBR1
UBOOT
BOOTIMG
RECOVERY
SEC_RO
LOGO
ANDROID
CACHE
USRDATA
Download OK
D:\KA08_JB.0.008.00\system.img
D:\KA08_JB.0.008.00\cache.img
D:\KA08_JB.0.008.00\userdata.img
100%
283405902 Bytes / 4070.05 KBp
EMMC
USB
921600 bps
1:14 sec
MT6577_S00
8192Mb DRAM
EMMC: (28Gb+8192Mb) HYNIX 0x2058494e5948

SD Card Upload SOP

1. Copy the upgrade file into root path of SD card, and then insert into phone
   Note. Make sure the SD card has enough free space which should be double than upgrade package, for example, 200M upgrade file needs 400M free space.

2. Keep press Vol-UP and power button for 2 seconds and enter into Select Boot Mode UI as the illustration P1.

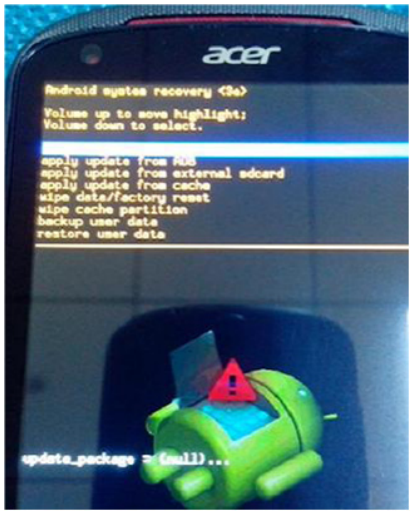


P1

3. When see the P1 UI, then press Vol-up to move the cursor to “Recovery Mode”and press Vol-down to select, then the system will migrate into illustration P2

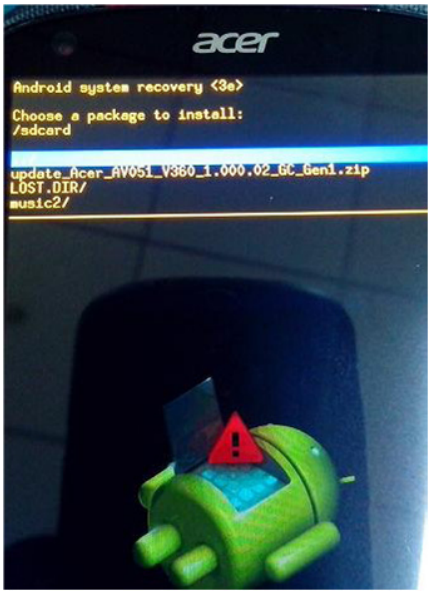
P2

4. At the status of P2, press power key, then system migrate into recovery menu as below illustration P3



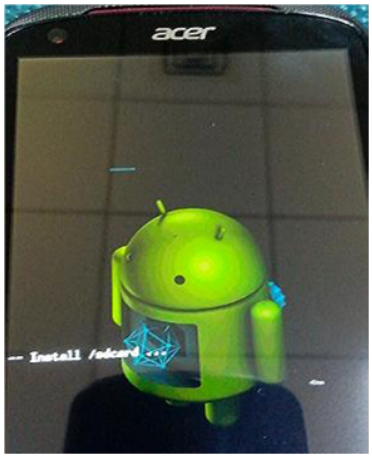
P3

5. At the status of P3, press Vol-up to move the option of “apply update from external sdcard”.
6. Press Vol-down to select “apply update from external sdcard”, then system migrates into the below illustration P4



P4

7. At the status of P4, press Vol-up to move the cursor on the “upgrade_Acer_AV051_V360_XXXXX_XX-XXX.zip” then press Vol_down to select, then system start to upgrade as illustration P6



P5

8. When the upgrade is done, then migrate into recovery menu and show “Install from sdcard complete” on screen as below illustration P6

P6

9. At the status of P6, “reboot system now” has been selected by default and then press Vol-down to reboot phone, then complete the upgrade work

10. Frequent reason of upgrade fail and action

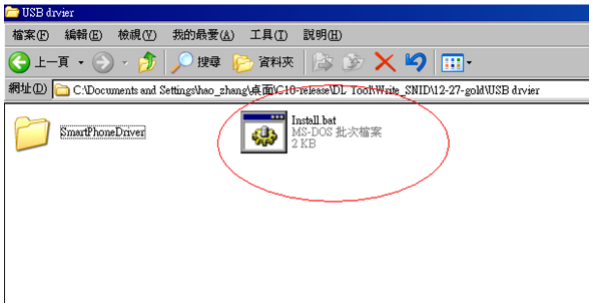
(1) Apply a fault SD card file package (for example other phone package)
Action: you should select appropriate upgrade file package

(2) Fail to copy the upgrade package into SD by interfere of anti-virus tool or original upgrade package is corrupted
Action: delete the corrupted file on SD card and copy from an appropriate PC resource or change SD card to use

Acer 22 Code Tool SOP

1. Pre-condition

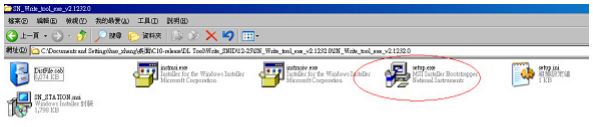
A: Please make sure the USB driver has been installed into your computer.Need to execute Install.bat in the USB driver folder



B: The OS of your computer should be Windows XP SP3 above or Win 7 version.

C: The SN_Write_tool_exe_v2.1232.0 should be ready in your computer.

User could install setup.exe in the folder of SN_Write_tool_exe_v2.1232.0 until the program setup complete.

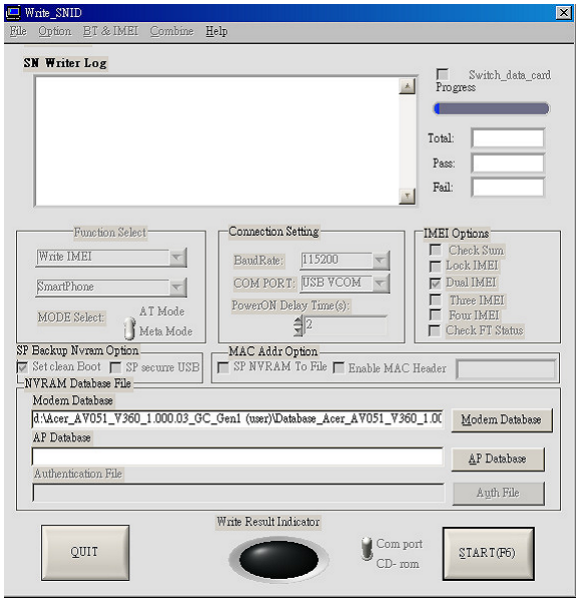


2. Install SOP

A. Make sure the mobile phone does not connect your computer, double click Write_SNID.exe to launch the Tool

B. If the screen shows as follow, it means that you need install SN_Write_tool_exe_v2.1232.0 first.

B: Enter tool UI as follow



C: Select the Modem database and AP database.

Please make sure the Modem/AP database (Normally in the SW version img folder) you are going to select is the same as the one in your mobile phone, OR you wont write SNID successfully

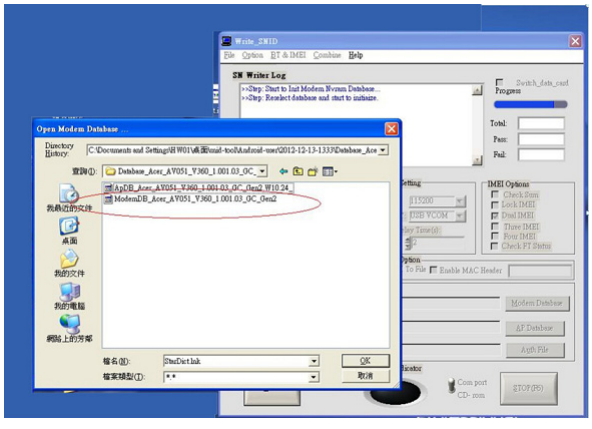
For example: if your mobile phone has been written SW Version

Acer_AV051_V360_1.000.00_GC_Gen1

Then your selected Modem Database should be the folder of

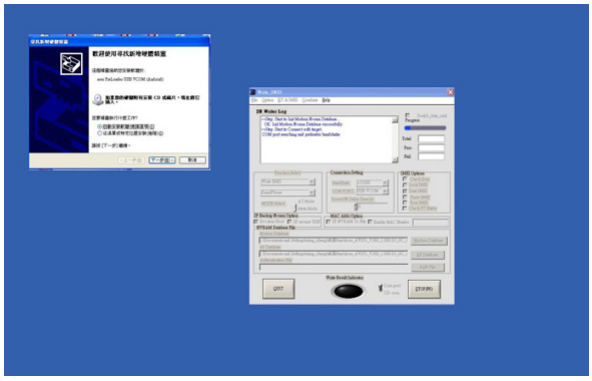
Acer_AV051_V360_1.000.00_GC_Gen1

Select the database file as follow illustration

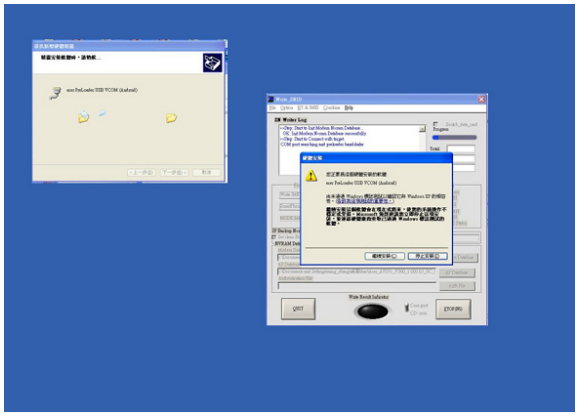


D: Click the Start button to process the Write Acer SNID

E: If the screen shows need add new component (Acer preloader Vcom; Acer USB Vcom), user should select auto install software(Recommend) and forward the driver until the install complete



F: Keep install if popup below windows until the driver install OK

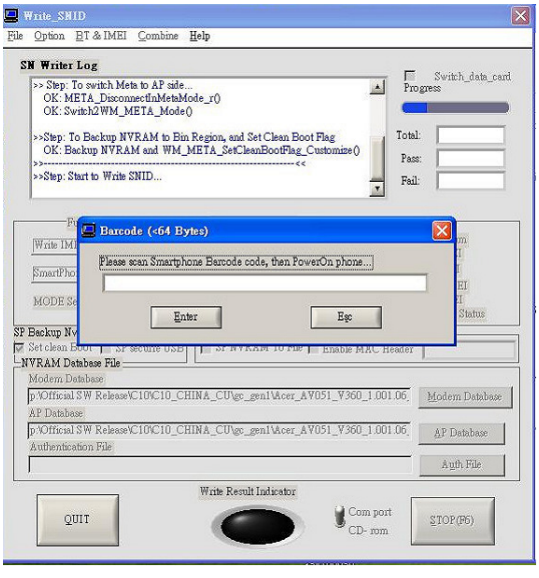


G: If the driver install is OK, please launch Tool again with take the battery power off->on, and execute the above procedure to load modem database and connect mobile phone

H: The tool will show COM Port searching and Preloader handshake

Then insert the USB cable into your mobile phone which should be power-off and the battery should be in the phone.

I: Input the Acer 22 Number into Dialog Windows



J: Proceeding Write SNID until the finish.

Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble and reassemble the smartphone for maintenance and troubleshooting.

IMPORTANT: The use of metal tools during disassembly may damage the casing. Use plastic tools where possible.

IMPORTANT: Cover the work area with a clean, dry, lint-free cloth before placing the smartphone face down.

Disassembly Requirements

To disassemble the smartphone, you need the following tools:

- Wrist grounding strap and conductive mat to prevent electrostatic discharge
- A clean, dry, lint free cloth to prevent damage to the LCD during disassembly
- Tweezers (plastic and metal)
    - Plastic Pry

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components.

Related Information

The product previews seen in the disassembly procedures may not represent the final product color or configuration.

General Information

Pre-disassembly Instructions

IMPORTANT: Before proceeding with the disassembly procedure, make sure that you do the following:

1. Turn off the power to the system.
2. Unplug the USB adapter and all other cables from the system.
3. Cover the work area with a clean, dry, lint-free cloth to protect the LCD panel.
4. Place the system on a flat, stable surface.

Disassembly Process

The disassembly process is divided into the following sections:

- External components disassembly
- Main unit disassembly

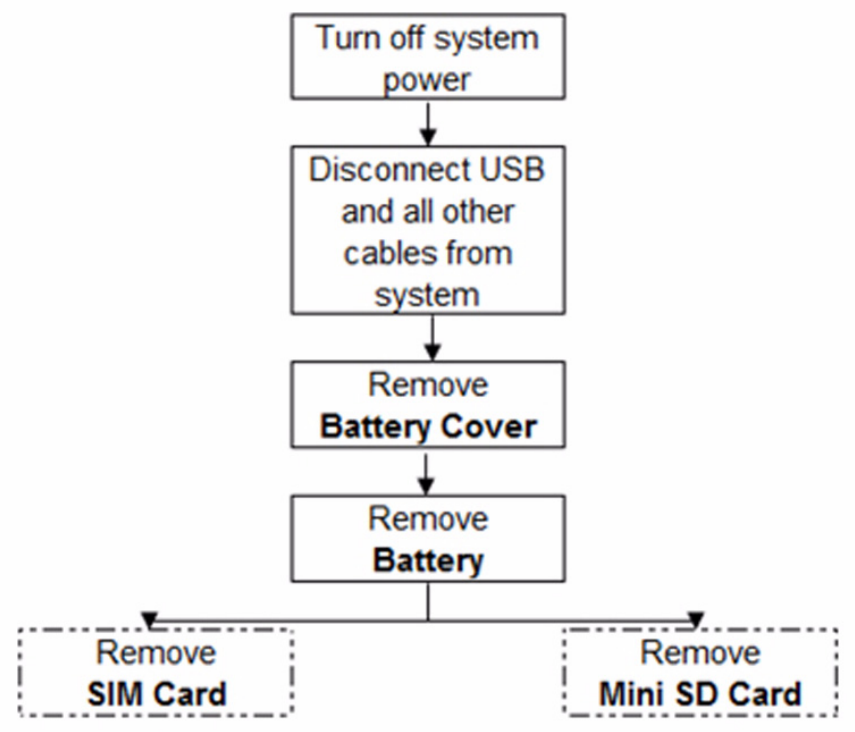
The flowcharts provided in the succeeding disassembly sections illustrate the entire disassembly sequence. Observe the order of the sequence to avoid damage to any of the hardware components.

Main Screw List

Screw	Quantity	Part Number
TORX MA1.6 Y L2.8 DARK AISI1018 30037	6	3500000069W

External Module Disassembly Process

External Modules Disassembly Flowchart


Turn off system power
Disconnect USB and all other cables from system
Remove Battery Cover
Remove Battery
Remove SIM Card
Remove Mini SD Card

NOTE: Items enclosed with broken lines (— - - —) are optional and may not be present.

Removing the Battery Cover

IMPORTANT: Cover the work area with a clean, dry, Lint-free cloth before placing the smartphone face down.

1. Remove the Battery Cover from the side as show as picture below.

Removing the Battery Cover

IMPORTANT: The Battery is locked in place ; do not force the Battery out of the battery bay before open in locking mechanism.

1. Gently pull down to release the Battery.

Removing the Memory Card and SIM Card

NOTE: The Memory Card and SIM Card are both optional items and may not be present.

1. Gently push and pull out the SIM Card and the Memory Card.

Unscrew the 6 Screws on the Rear Cover

Step	Screw	Quantity	Screw Type
Upp Assy	TORX MA1.6 Y L2.8 DARK AISI1018 30037	6	

Remove the Low case assemblies

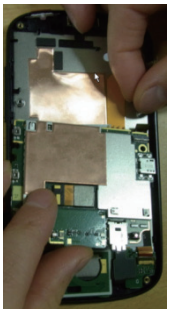
Remove the Main Board

1. Loosen the cable head on the main board.

2. Uncover the BTB on the Main Board.

3. Uncover the Main Board.

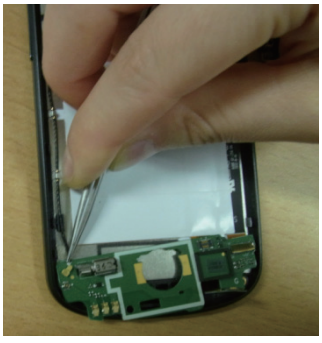
4. Loosen the ZIF on the main board.



5. Remove the main board

Remove the Antenna Sub Board

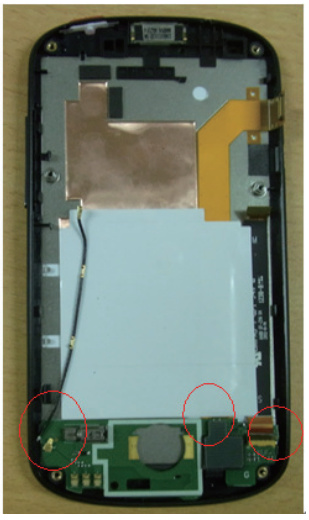
1. Loosen the ZIP on the sub board.
2. Loosen the cable head on the sub board
3. Uncover the BTB on the sub board.



Disassembly of Group Photo

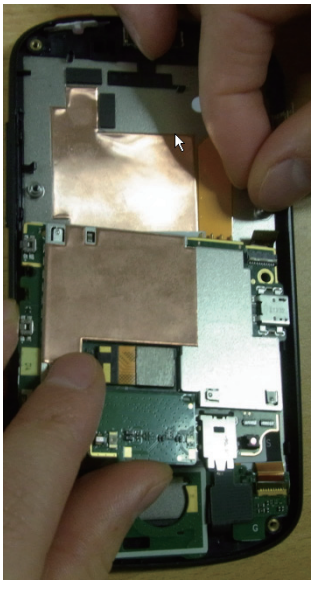
Replacing the Antenna Sub Board

1. Assemble back the ZIP on the sub board.
2. Contact the cable head on the sub board.
3. Cover the BTB on the sub board.



Replacing the Main Board

1. Assemble the ZIF on the main board.



2. Assemble back the Main board on the Upper cover.

Replacing the USB Cable

1. Assemble back the USB cable

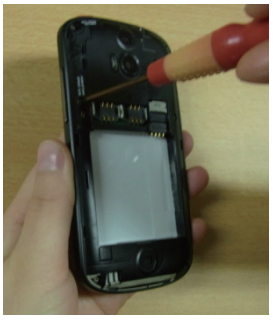
Replacing the BTB Connect

1. Assemble back the BTB Connect.

Replacing the Upper Case

1. Assemble the Low case and replacing.

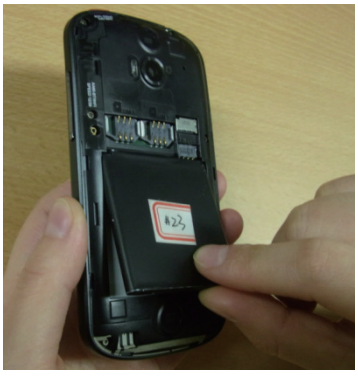
2. Insert the 6 screw as show.



Step	Screw	Quantity	Screw Type
Upp Assy	TORX MA1.6 Y L2.8 DARK AISI1018 30037	6	

Replacing the Battery

1. Insert the battery into the Battery bay and lock the Battery in the place.



Replacing the Battery Cover

1. Insert the Bottom of Battery Cover into the smart phone and push the Battery cover into the place.

Diagnostics and Troubleshooting

Diagnostic Tools and SOP

This document is intended to evaluate requirements of CCI Service Engineering (CSE), a application which facilitates repairing for after service.

Definitions, Acronyms, and Abbreviations

Term	Definition
SHV	Software/Hardware Version
TFT	Time to Failure Timer
FBI	Failure Bye Identifiers
EFEM	Engineer test mode
DOM	Date Of Manufacture
SN	Serial Number
Subsidy Lock	Interface for the application layer to determine whether ME is permitted operate with currently inserted SIM.

Delivery

Item Name/Description		Required (Y/N)	Note
Whole package customized by CCI	CCI to develop full and standalone package	Y	

Functionality

Handset Specific Data

Retrieve or update handset specific information

Item Name/Description		Required (Y/N)	Note
ReadIMEI	Read IMEI number	Y	
ReadSWVersion	Read SW Version	Y	
ReadDOM	Read DOM	Y	
ReadFBI	Read FBI	Y	
IncreaseFBI	Value of FBI increase 1	Y	
ResetFBI	Reset FBI to 0	Y	
ReadSN	Read SN	Y	
ReadBluetoothMacAddress	Read Bluetooth MAC address	Y	

Hardware Diagnostics

Test items of hardware components or accessory interfaces

Item Name/Description		Required (Y/N)	Note
Main Display	LCM- White	Y	
	LCM -Black	Y	
	LCM -Red	Y	
	LCM -Green	Y	
	LCM -Blue	Y	
	LCM Back Light-High	Y	
	LCM Back Light-Med	Y	
	LCM Back Light-Low	Y	
HID	Keypad	Y	Menu/Search/Back/Volume Up/Volume Down/Camera (Power & Home test by default behavior)
Audio	Test tone to speaker	Y	
	MIC test	Y	
	Test tone to earphone	Y	
	Record from earphone	Y	
Vibrator	Vibrator	Y	
BT	Turn on/off	Y	
Indicator	LED light color-Red	Y	
	LED light color-Green	Y	
	LED light color-White	Y	
Storage	SD card detection	Y	
Battery Status	Read battery status	Y	Voltage & temperature
Camera	Preview	Y	
Sensor	G-Sensor	Y	
	E-Compass	Y	

Stand-alone tool

Companion applications that launched by CSE and run standalone

Item Name/Description		Required (Y/N)	Note
DM Tool	Flashing	Y	

User Manual of Service Tool

Enter FTM

On Shutdown state just press VolumeDown + Power button, we can enter into the FTM., On the right is the FTM main interface, there are four options:

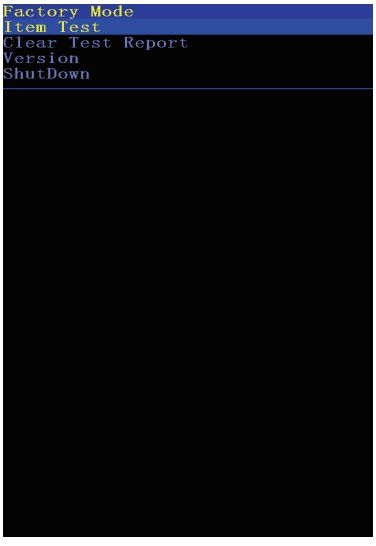
Item Test: the FTM test items

Clear Test Report: Clear test results

Version: version information

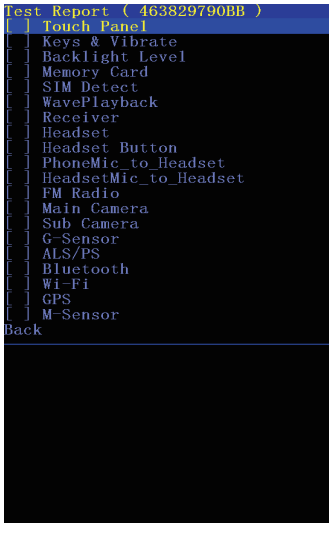
ShutDown: Shutdown

PS: under the FTM, mainly through the volume up and down keys to operate on key confirmation key, the next key is to select key.



Enter FTM test items

On the right is the main menu of FTM test item. To do a test, as long as you use the Down key select to one item, and then press the UP button to confirm the item. Selection On the Back item, you can return to the previous menu level

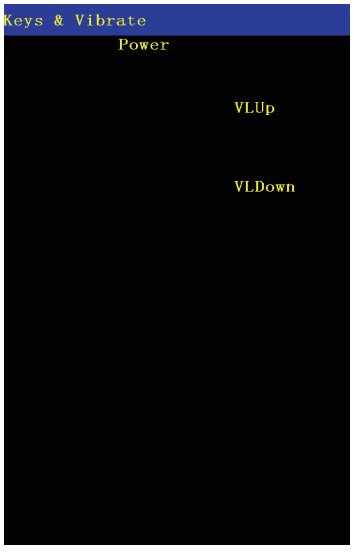


Touch Panel

After entering this test item, use your fingers to operate the screen, draw a straight line between the two red lines, horizontal 10 lines vertical 6 lines, and then automatically end the test.

Keys & Vibrate

Enter the Keys & Vibrate item, in turn, press the volume key, volume down key,power button, followed by the phone vibrate, then the test ends automatically and return to the main menu.

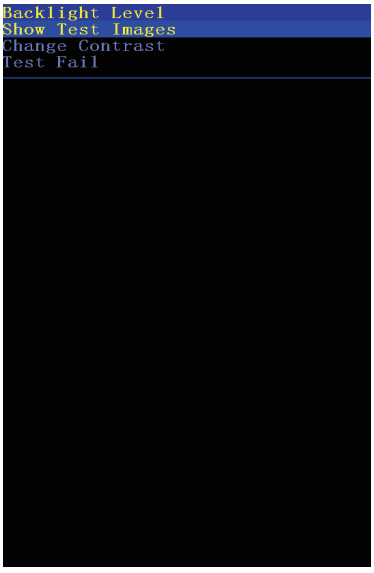


Backlight Level

After entering the test item, there will be two sub-measure items

Show Test Images: enter the submeasure and continuously press the button, check the display of default 8 photos is normal.

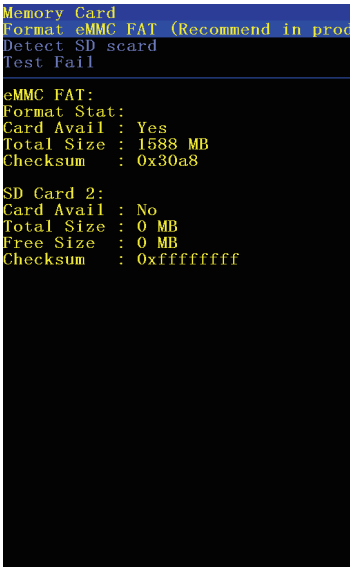
Change Contrast: This sub-test item test LCD shade. Election to the measured item, and then press 5 times on key to adjust the brightness of the screen to complete the test.



Memory Card

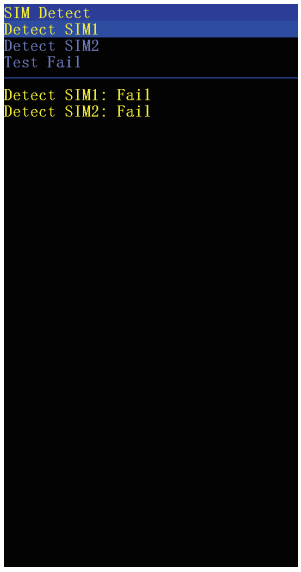
The system will automatically detect the SD, and then automatically complete the test but if parked in the right, just Format emmc FAT, you can continue to complete the test.

PS: The SD card is inserted before the test



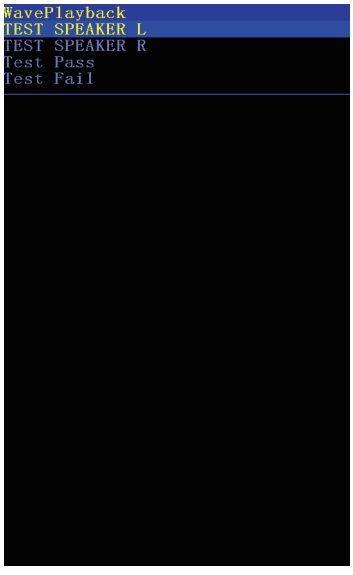
SIM Detect

Insert two SIM cards, the system automatically detects these two cards, and then check the detection results, select "Test Pass" or the "Test Fail"



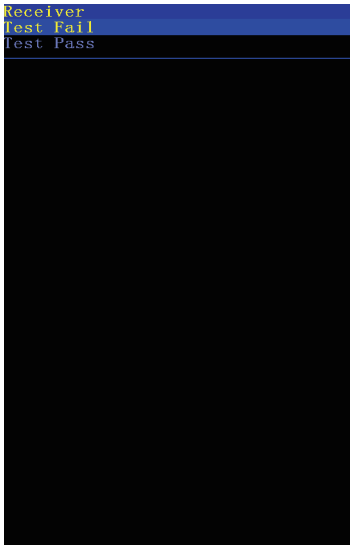
WavePlayback

In turn test the left and right channels of the Speaker, to see whether the music can output from both Speaker.



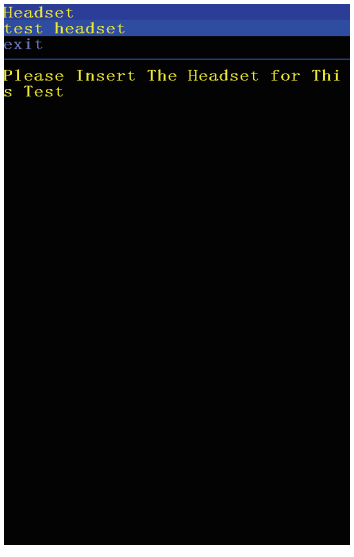
Receiver

Check whether the music play normal on the receiver.



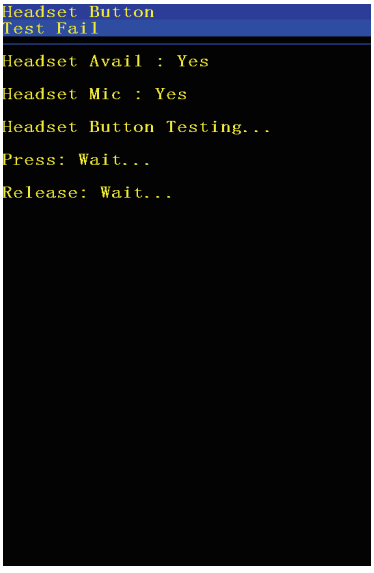
HeadSet

Insert the headset, select "test headset", and then the music output from the left and right channels, respectively.



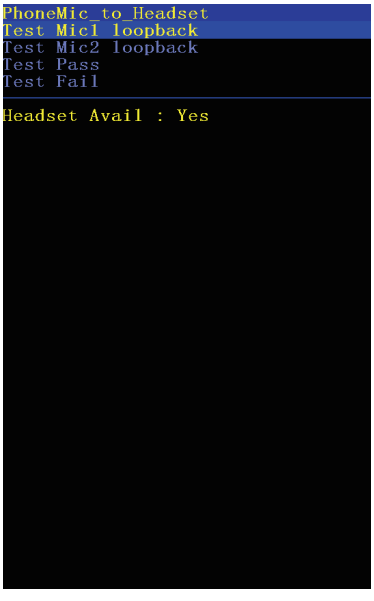
Headset Button

Plug in your headphones before enter the test item , click the headset hook button to complete the test



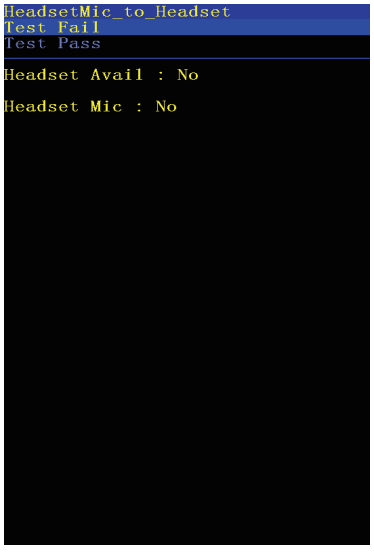
PhoneMic to Headset

In turn to select Mic1 Mic2, and then speak to Mic1 or Mic2, check whether the sound output from the headset.



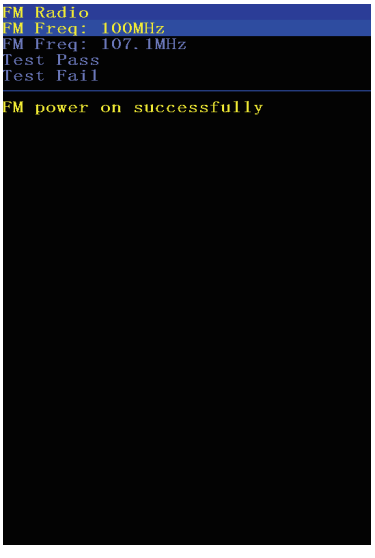
HeadsetMic to Headset

Speak to Headset Mic,then check whether the Sound output from the headset.



FM Radio

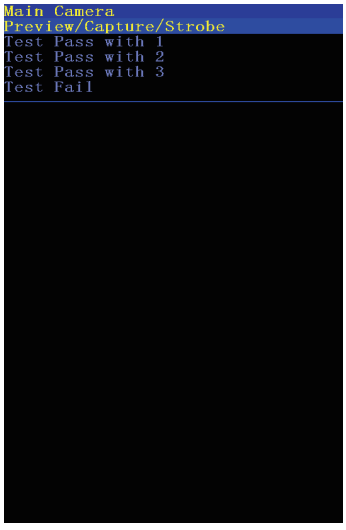
Plug into Headphones and test the FM can receive the 100MH and 107.1MHz broadcast.



Main Camera

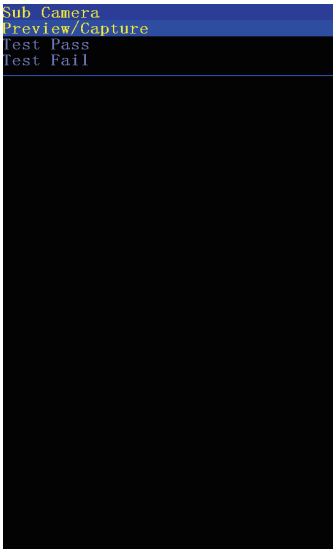
Put the phone on the tooling, select "Preview / Capture / Strobe" to test the Camera. Previously Move the system to test focus function. Then press the Down key to test flash (record number of flash & n) and then Up key to take picture and Down key to return.

Finally, based on the number of flash, select the "Test Pass with & n"



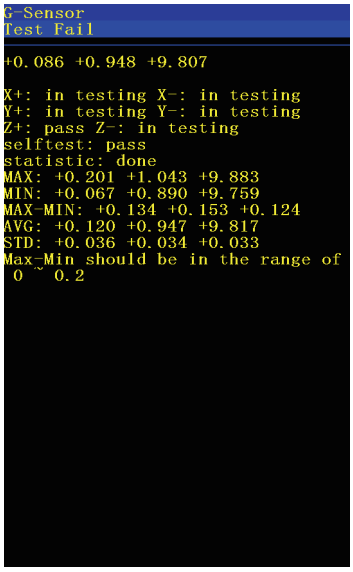
Sub Camera

Select the Preview / Capture, press on Up key for self-timer, and then press Down key to return.



Gsensor

Put the phone on the tooling, press the key to enter the test item, wait until the phone initialization is complete. Then turn the tooling and make six faces of the tooling parallel to the ground Respectively.



ALS/PS

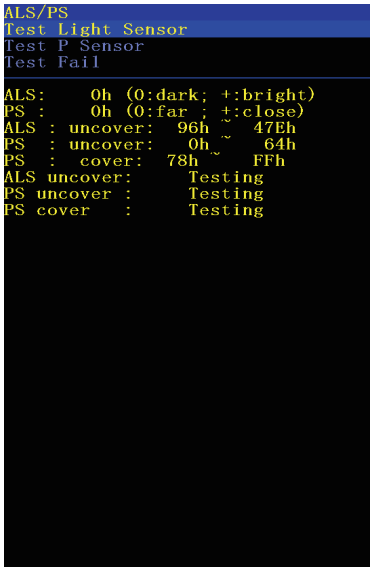
This item need to test the ALS uncover, and PS Uncover and Cover process.

Put the phone into the tooling, start the test item.

Step 1: the state of the phone is uncover, select the "Test Light Sensor"

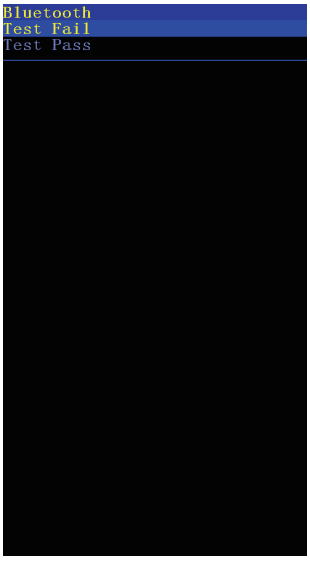
Step 2: the state of the phone is uncover, select "Test P sensor"

Step 3: the phone is in the state of the cover, again select the "Test P Sensor"


ALS/PS
Test Light Sensor
Test P Sensor
Test Fail
ALS: 0h (0:dark; +:bright)
PS : 0h (0:far ; +:close)
ALS : uncover: 96h ~ 47Eh
PS : uncover: 0h ~ 64h
PS : cover: 78h ~ FFh
ALS uncover: Testing
PS uncover : Testing
PS cover : Testing

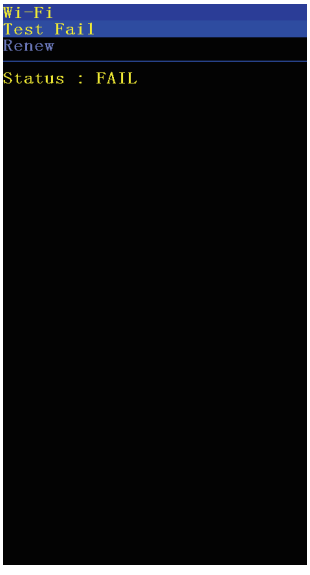
Bluetooth

Into the test item, after initialization into the test instrument. Use computer software to control the instrument to test. Finally, according to the test results to select the "pass or fail"



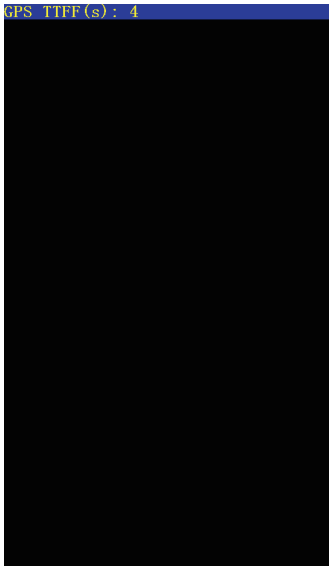
Wifi

Into the test items, the system will automatically find the hotspot called "TestAP" no password, then automatically end.



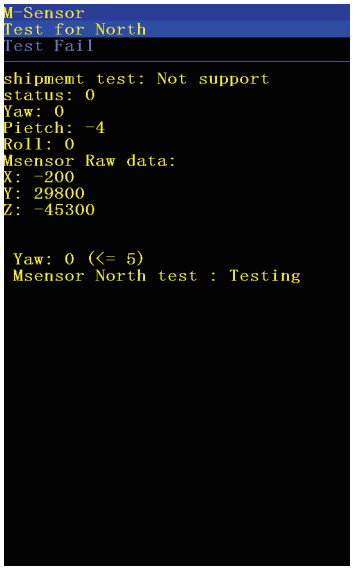
GPS

Put the phone on the tooling,enter the test item, and then the phone is searching for satellites.



mSensor

Into the test item, and then hold the phone, draw an "8" to calibrate. Put the phone on the tooling with a north-south direction placed, and finally select "Test for North" to complete the test.



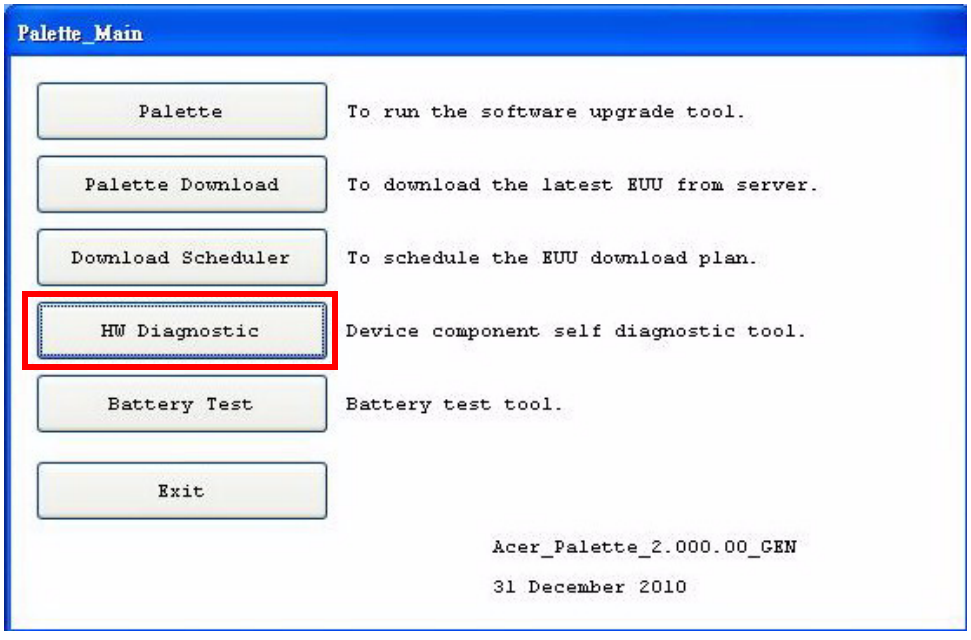
Thank you!Palette Hardware Diagnostic Tool Introduction

Introduction

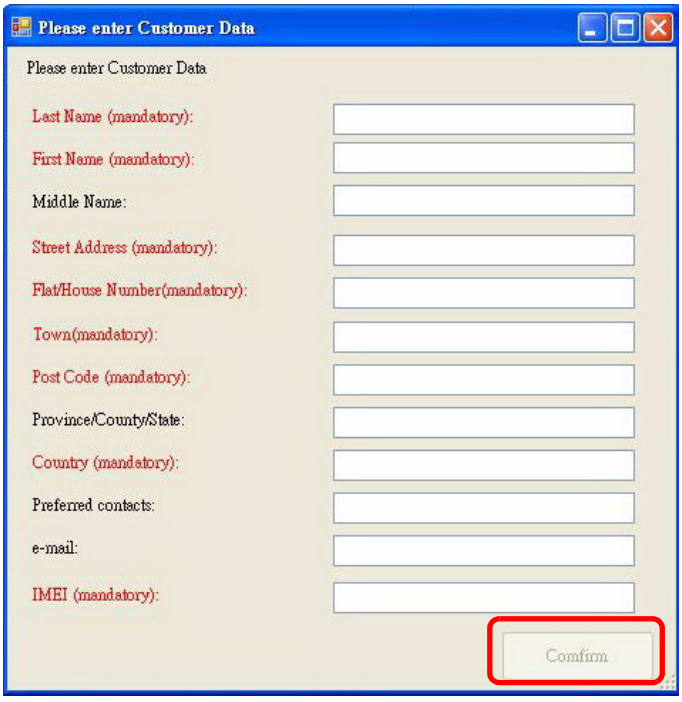
Palette is a service tool which developed by Acer software team. This is a simple test tool to supply front end operators shop or collection points for simple diagnostic testing.

Installation procedure

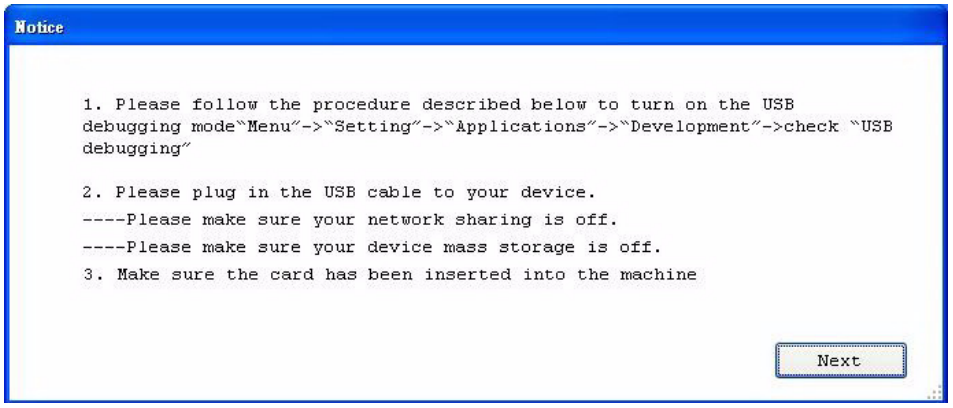
1. Install "Acer_Palette_2.000.00_GEN.msi" at PC/NB site.
2. Execute "Palette_Main". Select "HW Diagnostic".

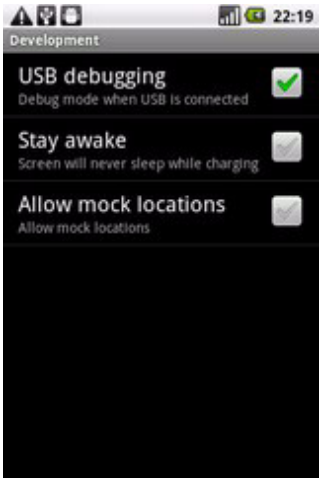


3. Please fill in necessary customer's data to the columns then click "Confirm".

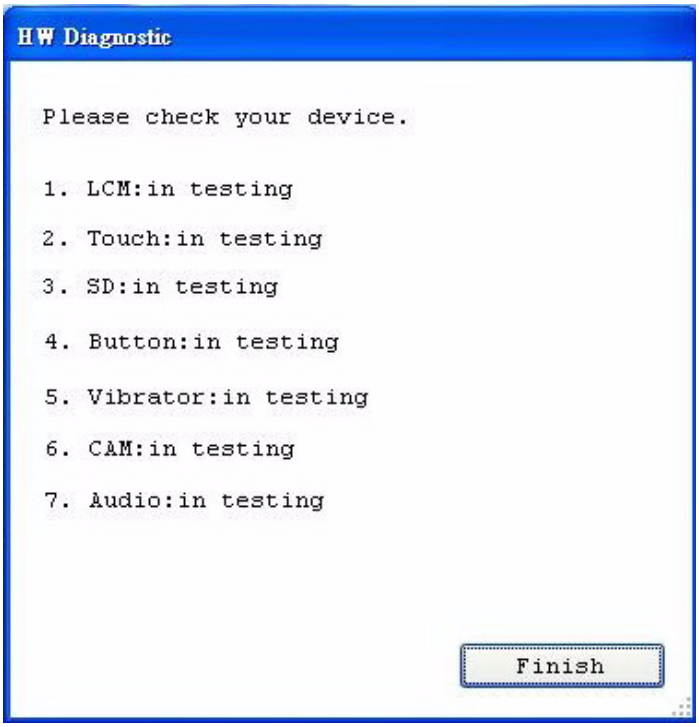


4. At Android device, ensure micro SD card is inserted. Please enable "USB Debugging" option (tap Menu → Settings → Applications → Development, click "USB Debugging") then contact to PC via USB cable.


Notice
1. Please follow the procedure described below to turn on the USB debugging mode"Menu"->"Setting"->"Applications"->"Development"->check "USB debugging"
2. Please plug in the USB cable to your device.
----Please make sure your network sharing is off.
----Please make sure your device mass storage is off.
3. Make sure the card has been inserted into the machine
Next

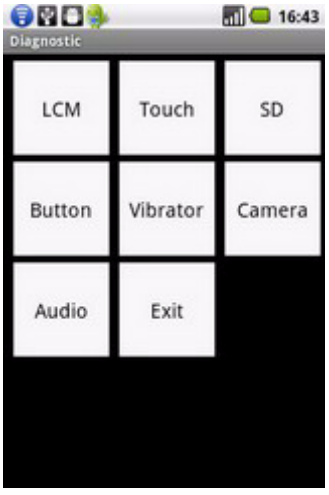


5. Now HW Diagnostic status screen pop-up.

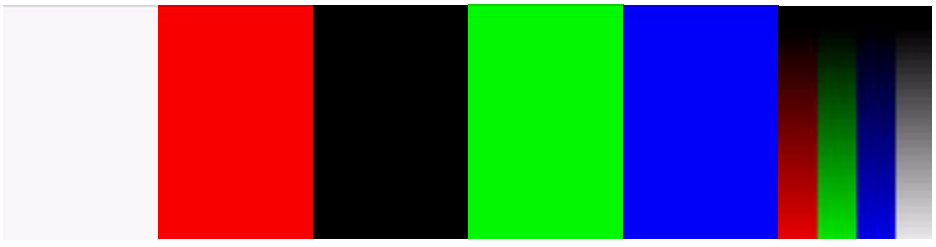


Test Item

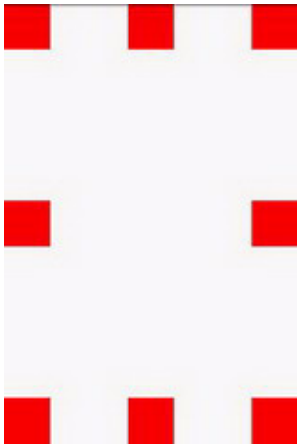
1. Diagnostic Test Menu
There are 7 test items can be used in Diagnostic test.



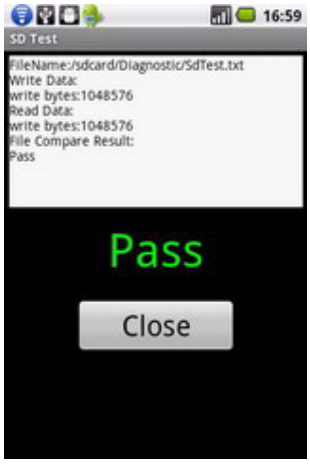
2. LCM
Tap the screen to change difference colors to check LCD. Confirm test is passed if no errors.



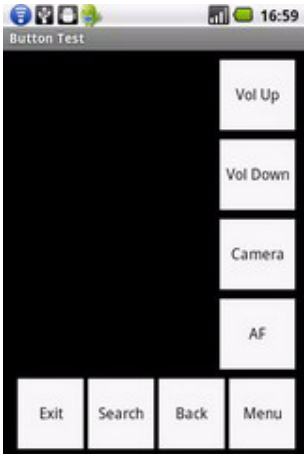
3. Touch
   Draw 4 lines on screen. Confirm test is passed if no errors.



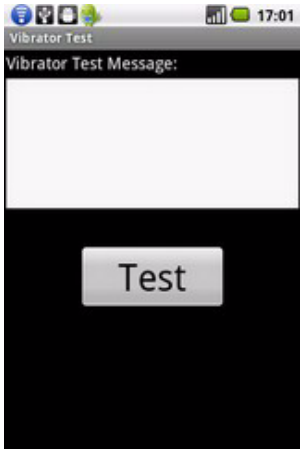
4. SD
   Test SD card read/write. Select "Close" if no errors.



5. Button
   Press each buttons to verify the functions. Tap "Exit" to quit the test.
   Confirm test is passed if no errors.



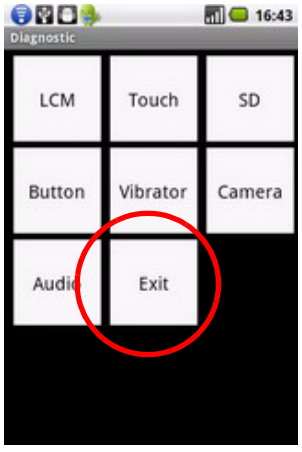
6. Vibrator
Tap "Test" to verify vibration function. Confirm test is passed if no errors.



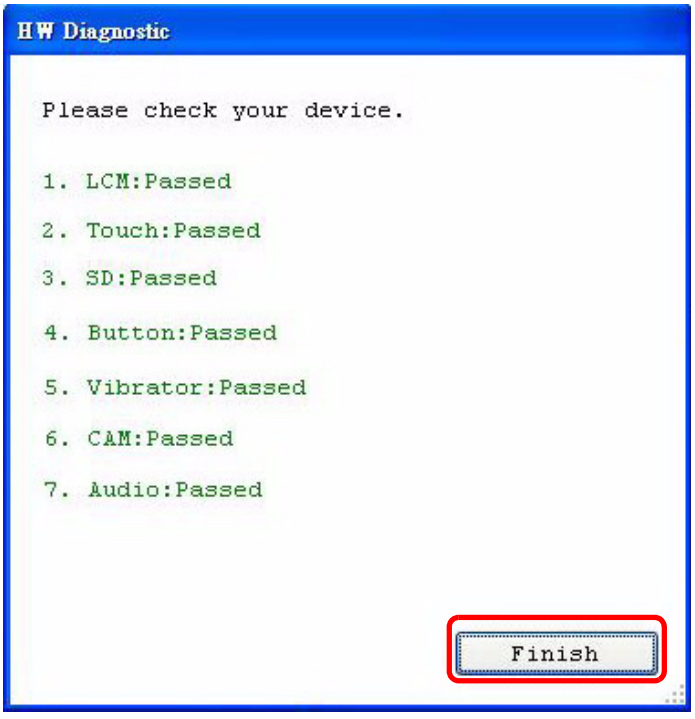
7. Camera
   Check the camera screen is good. Press "Back" button to quit test. Confirm test is passed if no errors.

8. Audio
   This test verifies sound playing/recording on Speaker, Receiver and Earphone. Press "Back" button to quit the test. Confirm test is passed if no errors.

9. Tap "Exit" to quit test program on Android device.

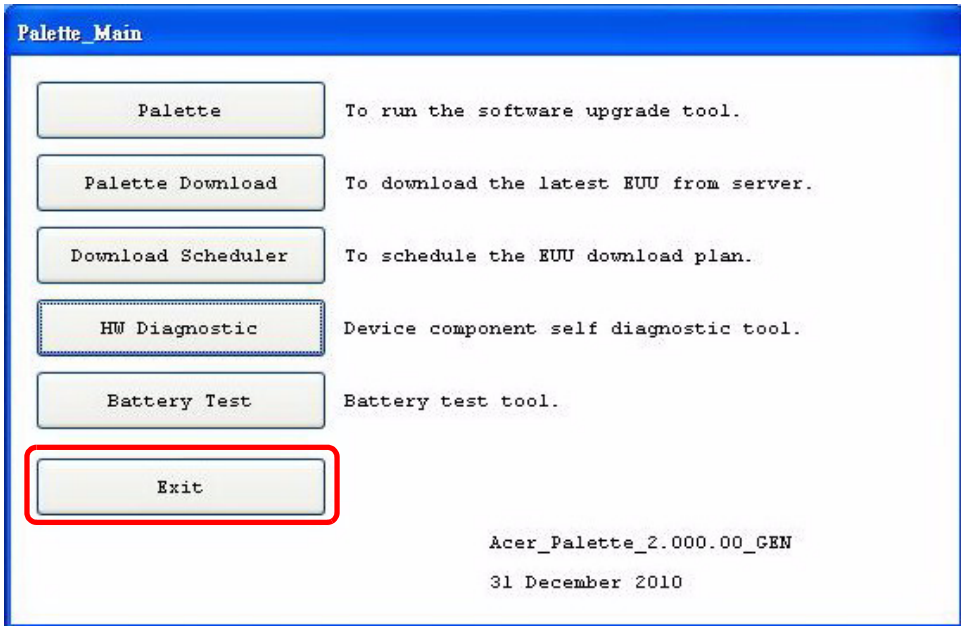


10. Click "Finish" to complete simple diagnostic testing.



Quit Palette program

Tap "Exit" to close the program.



Serial Number Definition

The following information describes the serial number details available on the Acer product sticker. To view the serial number, remove the Back Cover and Battery (see "Disassembly Process" on page 16) as shown below:

The following describes the information on the product sticker:

Acer 22 Barcode

Follows Code 128 standard—refer to http://www.adams1.com/pub/russadam/128code.html

Acer_22_Code_SN

PPPPPPPPPPYWWSSSSSMMVV

Code	Description
PPPPPPPPPP	Acer Part Number
YWW	3 digit numeric year and week code
SSSSS	5characteruniquehexadecimalcodebymanufacturerbaseandreseteachweek (0-9, A, B, C, D, E, F 16 code)
MM	Manufacturer code
VV	English version code

Acer SNID

YWWddddddMM

Code	Description
YWW	3 digit numeric year and week code (as above)
dddddd	6 digit unique number derived from Acer 22 Code SN (SSSSS) Transfer Rule: $S_1S_2S_3S_4S_5$ dddddd = $S_1 * 16^4 + S_2 * 16^3 + S_3 * 16^2 + S_4 * 16^1 + S_5$ For example: 001FD = 000509 ($1 * 16^2 + 15 * 16^1 + 13$)
MM	Manufacturer code (as above)

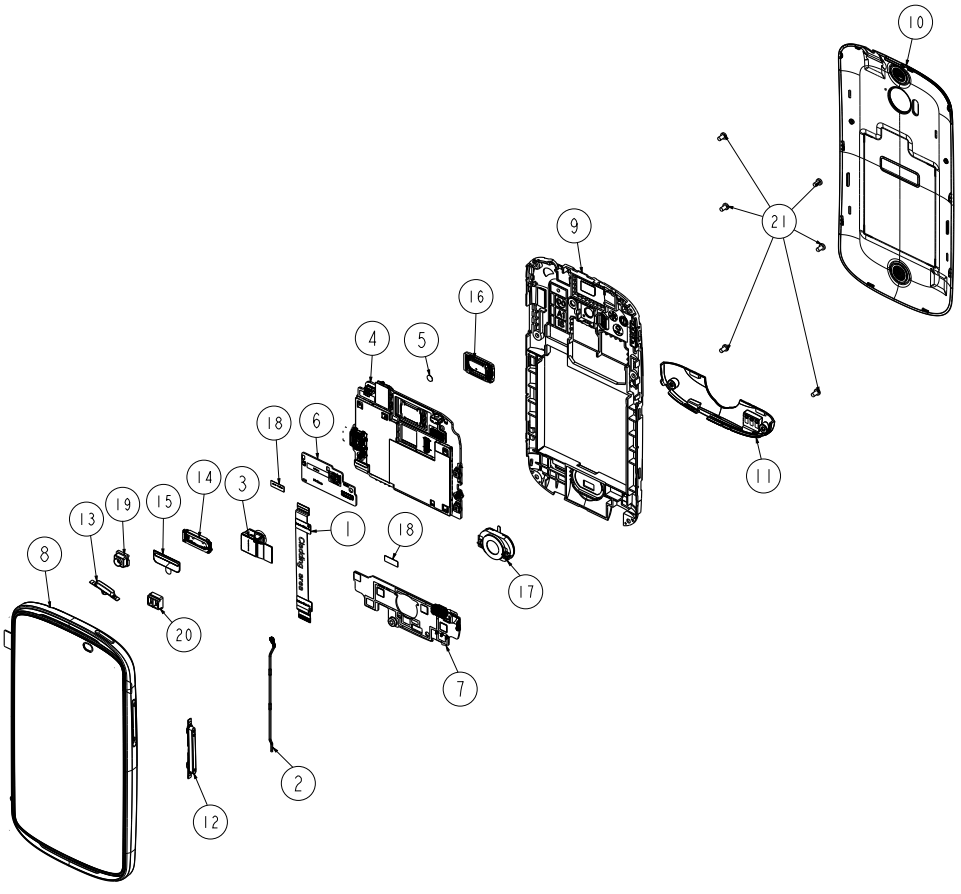
FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of the F900 smartphone. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. If for whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

V360 Smartphone Exploded Diagram



PART NAME	DESCRIPTION	ACER PART NO.
FPC	AA66 GF-256 REV:1.0 MB/SB FPC	50.HBPH1.001
RF CABLE	WFL2-2HF6-04K2TV-A HRS	50.HBPH1.002
CAMERA 5M	CAMERA CP56A548 ABILITY	KR.05M0A.001
MB-ASSY DUAL	AA66 MB+SPONGE+GASKET (Non NFC)	HB.70511.00V
WATERPROOF LABEL	AV30 WATERPROOF £p5mm CROSS	47.H460W.005
ANTENNA BOARD	AA66 SB(ANTENNA)+SPONGE	55.HBPH1.001
SUB BOARD	AA66 SB(AUDIO)	55.HBPH1.002
LCD MODULE BLACK(LCD.TP.UPPER)	AA66 UPPASY(BLACK)+TP+LCM	6M.HBPH1.001
LOW-ASSY DUAL	AA66 LOWASY(BLACK)+RING(SIL) (Non NFC)	60.HBPH1.001
BATTERY COVER BLACK DUAL	AA66 BATCOV(BLACK)+SPONGE (Non NFC)	60.HBPH1.002
BATTERY COVER BLACK SINGLE NFC	AA67 BATCOV(BLACK)+SPONGE (NFC)	60.HBRH1.002
MAIN ANTENNA	I-ANTENNA AA66 MAIN_PENTA	60.HBPH1.004
VOLUME KEY	BUTTON P+R BLACK VOLUME KEY 2KEY	42.HBPH1.001
POWER KEY BLACK	P+R BLACK POWER 1KEY	42.HBQH1.001

PART NAME	DESCRIPTION	ACER PART NO.
RECEIVER	AA66 RECEIVER	TBD
RECEIVER MESH	AA66 RECEIVER MESH	TBD
SPEAKER 1	XHS160901SW45P42-02 HAOSHENG	23.HBPH1.001
SPEAKER 2	SO181238LD01 GETTOP	23.HBPH1.002
KAPTON	KAPTON ZIF CONNECTOR	47.HBPH1.001
RUBBER VGA	RUBBER SI VGA	47.HBPH1.002
RUBBER P-SENSOR	RUBBER SI P-SENSOR	47.HBPH1.003
SCREW	TORX MA1.6 Y L2.8 DARK AISI1018 30037	86.HBPH1.001

V360 Smartphone Spare Parts List

Spare Parts List

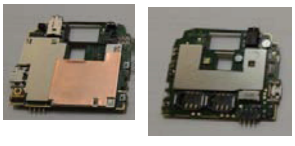
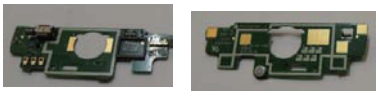
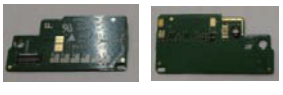
Photo	DESCRIPTION	ACER P/N
	RF CABLE	50.HBPH1.002
	USB CABEL BLACK	HC.70211.01F
	FPC	50.HBPH1.001
	EARPHONE	HC.00111.002
	BATTERY CHINA	KT.0010S.006
	BATTERY MAIN	KT.0010S.004
	BATTERY FRENCH	KT.0010S.005
	ADAPTER CHINA BLACK	KP.0050B.003
	ADAPTER UK	KP.0050P.002
	ADAPTER US	KP.0050P.003
	ADAPTER EU	KP.0050P.001
	MB-ASSY DUAL	HB.70511.00V
	MB-ASSY SINGLE NFC	HB.70511.00W
	WATERPROOF LABEL	47.H460W.005
	ANTENNA BOARD	55.HBPH1.001
	SUB BOARD	55.HBPH1.002
	LCD MODULE BLACK(LCD.TP.UPPER)	6M.HBPH1.001
	LCD MODULE WHITE(LCD.TP.UPPER)	6M.HBQH1.00

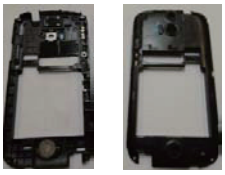
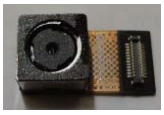
Photo	DESCRIPTION	ACER P/N
	LOW-ASSY DUAL	60.HBPH1.001
	LOW-ASSY SINGLE NFC	60.HBRH1.001
	BATTERY COVER BLACK DUAL	60.HBPH1.002
	BATTERY COVER WHITE SINGLE	60.HBSH1.001
	BATTERY COVER WHITE DUAL	60.HBQH1.001
	BATTERY COVER BLACK SINGLE	60.HBRH1.002
	RECEIVER	60.HBPH1.003
	MAIN ANTENNA	60.HBPH1.004
	VOLUME KEY	42.HBPH1.001
	POWER KEY RED	42.HBPH1.002
	POWER KEY BLACK	42.HBQH1.001
	SPEAKER 1	23.HBPH1.001
	SPEAKER 2	23.HBPH1.002
	KAPTON	47.HBPH1.001
	RUBBER VGA	47.HBPH1.002

Photo	DESCRIPTION	ACER P/N
	RUBBER P-SENSOR	47.HBPH1.003
	CAMERA 5M	KR.05M0A.001
	SCREW	86.HBPH1.001

Online Support Information

This section describes online technical support services available to help you repair your Acer device.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer Branch Offices and Regional Business Units may access our website. However some information sources will require a user i.d. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all of Acer's products including:

- Service guides for all models
- User's manuals
- Training materials
- Software utilities
- Spare parts lists
- TABs (Technical Announcement Bulletin)

For these purposes, we have included an Acrobat File to facilitate the problem-free downloading of our technical material.

Also contained on this website are:

- Detailed information on Acer's International Traveler's Warranty (ITW)
- Returned material authorization procedures
- An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.

Numerics

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